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ABSTRACT

This volume on Mexico is one of a series of handbooks prepared by the Foreign Area Studies (FAS) of the American University. It is designed to be useful to military and other personnel who need a convenient compilation of basic facts about the social, economic, political, and military institutions and practices of Mexico. The emphasis is on objective description of the nation's present society and the kinds of possible or probable changes that might be expected in the future. The book is organized into four sections covering social, political, economic, and national security aspects of Mexico. An extensive bibliography and a glossary of Mexican terms are included. (Author/ND)

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AREA HANDBOOK
for
MEXICO

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FOREWORD

This volume is one of a series of handbooks prepared under the auspices of Foreign Area Studies (FAS) of The American University, designed to be useful to military and other personnel who need a convenient compilation of basic facts about the social, economic, political and military institutions and practices of various countries. The emphasis is on objective description of the nation's present society and the kinds of possible or probable changes that might be expected in the future. The handbook seeks to present as full and as balanced an integrated exposition as limitations on space and research time permit. It was compiled from information available in openly published material. Extensive bibliographies are provided to permit recourse to other published sources for more detailed information. There has been no attempt to express any specific point of view or to make policy recommendations. The contents of the handbook represent the work of the authors and FAS and do not represent the official view of the United States Government.

An effort has been made to make the handbook as comprehensive as possible. It can be expected, however, that the material, interpretations, and conclusions are subject to modification in the light of new information and developments. Such corrections, additions, and suggestions for factual, interpretive, or other change as readers may have will be welcomed for use in future revisions. Comments may be addressed to—

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PREFACE

Continuous civil war during the second decade of the present century and two decades of political unrest and drastic social and economic change contrast with the Mexico of 1969 which has had, for a full generation, an unbroken record of social stability and constitutional government, has maintained one of the world's highest and most constant rates of economic growth, and has become an industrialized cosmopolitan country.

This book is an attempt to provide, in compact, convenient, balanced and objective form, an integrated exposition and analysis of the dominant social, political, and economic aspects of the society. It is designed to give readers an understanding of the dynamics of the component elements of the society and an insight into the ideas and feelings, the goals, and the hopes and fears of its people.

In preparing this it has been possible to draw on a large and increasing literature in both Spanish and English. The principal difficulty in research has been statistical: figures on important social and economic aspects of the country are either lacking or published late and in fragmentary form. Where statistics of evident reliability have been available, they have been presented. Any study of a country as complex and apparently paradoxical as Mexico is unavoidably interpretative. Where interpretation has been necessary, it has been offered tentatively and has drawn on the experience of those authors who lived in Mexico for a number of years.

Spanish usage is based on *The New Appleton-Cuyas Dictionary: English-Spanish and Spanish-English* (New York: Doubleday, 1964). Spanish words and phrases have been employed in the text only where satisfactory English equivalents are wanting; they are defined at first appearance or, if frequently used, are found in the Glossary appended to the book.

COUNTRY SUMMARY

1. COUNTRY: Official name is Estados Unidos de México (United States of Mexico); unofficial name is México. Under the Spanish it was Nueva Espana (New Spain); under the Aztecs, Anáhuac.

2. GOVERNMENT: A federal republic with a strong executive, a bicameral congress (consisting of a chamber of deputies and a senate), and a judiciary.

3. CONSTITUTION: Promulgated in 1917, and subsequently amended.

4. POPULATION: About 47,600,000 in 1968; 65–75 percent mixed Indian and European; 15–25 percent Indian; 10 percent Caucasian; 1 percent Negro. Growth rate: about 3.5 percent per year.

5. SIZE: 761,602 square miles.

6. TOPOGRAPHY: Two major mountain ranges run roughly north and south. Between them lies the elevated Mexican plateau extending from southern Puebla northward into the southwestern part of the United States. The southern portion of the plateau, the Mesa Central, contains the Valley of Mexico. There are few other areas of plains; the most extensive are found in the northern deserts. The Pacific coastal plain is narrow, the only extensive areas occurring in the desert and the semi-tropical areas of Sonora and Sinaloa adjacent to the Sea of Cortes. Vegetation is sparse in the desert and semi-arid regions of northern and central Mexico but grades into tropical forest in the southern portions of the country and temperate forests in the interior plateaus.

7. LANGUAGES: Official and predominant language is Spanish; there remain about 50 indigenous languages and dialects.

8. RELIGIONS: Roman Catholic, 90 percent or more; Protestant, 2–3 percent; Jewish, about 0.3 percent.

9. EDUCATION: Literacy rate in 1968 was 72 percent. There are 275 institutions of higher learning with about 133,400 full-time students.

10. HEALTH: Major causes of death in 1964 were influenza and pneumonia; gastritis, enteritis, and related diseases; accidents; and heart disease.

11. CLIMATE: Three basic climatic regions: the arid north; the tropical lowlands of the east, south, and west coasts; the temperate and cool tropical uplands of the central zone and parts of the interior south.

12. JUSTICE: The principal legal origins are in the Roman civil law, with some other influences; embodied in Constitution of 1917 and Penal Code of 1931. Federal judiciary consists of supreme court, circuit courts, and district courts; there are state supreme courts and municipal courts as well.

13. ADMINISTRATIVE DIVISIONS: 29 states, 2 territories, and the Federal District.

14. ECONOMY: Mixed industrial-commercial and agricultural. In 1967, industry comprised 36.6 percent of gross domestic product (GDP); commerce and finance, 26 percent; services, 17.5 percent; agriculture, 15.8 percent; transportation and communication, 4.1 percent. About half of the work force was engaged in agriculture, 22.3 percent in industry, 13.6 percent in services, 10.6 percent in commerce and finance, and 4.1 percent in transportation and communication.

15. EXPORTS: Accounted for 9.1 percent of 1967 GDP. Agricultural products (principally cotton, corn, sugar, coffee) comprised 40.0 percent of total exports; manufactured goods, 20.0 percent; minerals and products, 16.8 percent. Principal destinations of exports were the United States, Western Europe, Latin America, and Japan.

16. IMPORTS: Accounted for 11.7 percent of 1967 GDP. Consumer goods (principally automobiles) comprise 10.9 percent of imports, while production goods (mainly machinery, industrial equipment) comprise over 50 percent. The United States and Western Europe supply nearly 90 percent of Mexican imports.

17. CURRENCY: The Mexican peso (Mex $) is valued at 0.071093 grains of fine gold. Maintains parity of 12.5 pesos to the U.S. dollar. Last devalued in 1954.

18. COMMUNICATIONS: Telephones, 947,535; telegraph, 92,000 miles; radio, 455 commercial stations and 9 million receivers; television, 55 stations (including relays) and about 2 million receivers; newspapers, about 220 with combined circulation of about 9 million—almost entirely in urban areas.

19. TRANSPORTATION: *Railroads:* in 1968, 15,000 miles of track; 1,000 diesel units; 26,000 freight cars; 2,000 passenger cars; 13.5 billion ton miles of freight (1967). *Navigable rivers and waterways:* lower courses of the Rio Bravo and the Panuco are navigable by ocean-going vessels as far as ports of Matamoros and Tampico; the lower Coatzacoalcos navigable as far as Minatitlán. *Roads:* in 1967, 40,200 miles of surfaced roads (20,000 miles paved). *Pipelines:* 1966, 3,300 miles natural gas, 2,400 miles crude oil, 2,100 miles petroleum products.

20. **ELECTRIC POWER**: Total generating capacity 6774 megawatts (1968); over 4 million subscribers (1968); half thermoelectric and half hydroelectric; mostly 50 cycle current, substantial 60 cycle current.

21. **PORTS AND PORT FACILITIES**: Major seaport is Veracruz. Other important ports tend to be specialized, as: Tampico, petroleum products and ore concentrates; Coatzacoalcos, sulfur; Venustiano Carranza, salt; Santa Rosaliá, copper ore. Lesser ports serve local shipping, fishing fleets, or the resort business.

22. **AIRFIELDS**: 179 airfields in 1967. Los Animas (Guadalajara), Acapulco International, and Mexico City International are the largest at over 10,000 feet in length.

23. **PRINCIPAL AIRLINES**: *Domestic:* Aeronaves de Mexico and Compañía Mexicana de Aviación. *Foreign:* American, Air France, Air West, Avianca, Braniff, Canadian Pacific, Cubana, Delta, Eastern, Iberia, Pan American, Quantas, and Western.

24. **MERCHANT MARINE**: 556,000 tons under Mexican registry (1967); 25 million metric tons of freight (1966).

25. **INTERNATIONAL AGREEMENTS AND TREATIES**: There are 53 bilateral treaties and agreements with the United States and 147 multilateral treaties. Among the more important of the latter are the Inter-American Treaty of Reciprocal Assistance (1947 Rio Pact) and the Charter of the Organization of American States. There are no military pacts.

26. **AID PROGRAMS AND MILITARY ASSISTANCE PROGRAMS**: Total aid in 1967, US$100,000.

27. **OVERSEAS TERRITORIES AND POSSESSIONS**: None.

28. **INTERNATIONAL OBLIGATIONS AND MEMBERSHIPS**: United Nations and related international agencies; Organization of American States; 14 other international organizations and specialized agencies.

29. **ARMED FORCED STRENGTH**: About 60,000 in 1966; police, figure not available; militia, gendarmerie, or National Guard, none. Military budget in 1968 was 9.4 percent of total federal budget.

MEXICO

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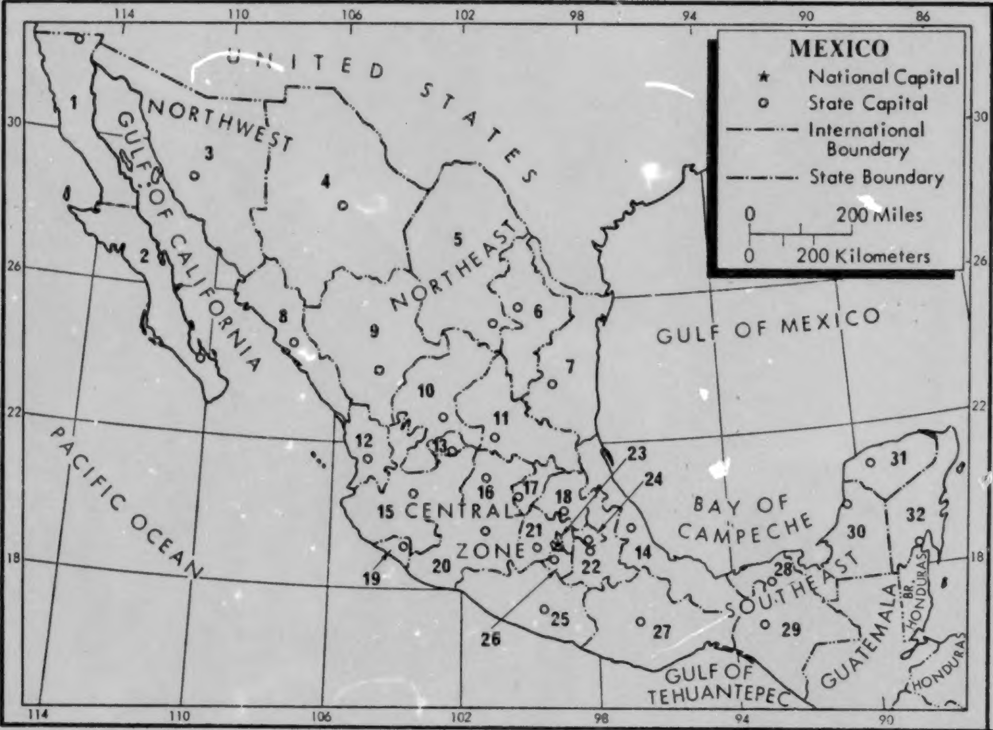
MEXICO
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GULF OF TEHUANTEPEC
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STATES, TERRITORIES AND RESPECTIVE CAPITALS

1. Baja California North (Mexicali)
2. Baja California South (La Paz)
3. Sonora (Hermosillo)
4. Chihuahua (Chihuahua)
5. Coahuila (Saltillo)
6. Nuevo León (Monterrey)
7. Tamaulipas (Ciudad Victoria)
8. Sinaloa (Culiacán)
9. Durango (Durango)
10. Zacatecas (Zacatecas)
11. San Luis Potosí (San Luis Potosí)
12. Nayarit (Tepic)
13. Aguascalientes (Aguascalientes)
14. Veracruz (Jalapa)
15. Jalisco (Guadalajara)
16. Guanajuato (Guanajuato)
17. Querétaro (Querétaro)
18. Hidalgo (Pachuca)
19. Colima (Colima)
20. Michoacán (Morelia)
21. México (Toluca)
22. Puebla (Puebla)
23. Federal District (Mexico City)
24. Tlaxcala (Tlaxcala)
25. Guerrero (Chilpancingo)
26. Morelos (Cuernavaca)
27. Oaxaca (Oaxaca)
28. Tabasco (Villahermosa)
29. Chiapas (Tuxtla)
30. Campeche (Campeche)
31. Yucatán (Mérida)
32. Quintana Roo (Chetumal)

Figure 1. The United States of México (Estados Unidos de México).

SECTION I. SOCIAL

CHAPTER 1

GENERAL CHARACTER OF THE SOCIETY

The present Mexican state came into being with the dissolution of the Spanish empire and the collapse of the brief Middle American empire of Agustín de Iturbide in 1823 (see ch. 3, Historical Setting). A federal republic with 29 states, 2 territories, and a federal district, the country is headed by a strong executive with a subordinate legislature and judiciary (see ch. 13, The Government System). Since 1946 the Institutional Revolutionary Party (Partido Revolucionario Institutional—PRI), a coalition of groups ranging from the moderate Left to the moderate Right, has controlled the government.

The various segments of the population—the farmers, organized labor, industrial and commercial groups, the professionals, and the clergy—appear to support solidly the PRI. Minority opposition is found among members of the illegal Fuerza Popular, (clerical fascists), overt and covert Communists of various persuasions, some anarchists, and members of the "new Left" who in the summer and fall of 1968 sparked a series of public demonstrations and riots (see ch. 14, Political Dynamics). On the whole, however, the government appears quite stable. It has attempted to ensure broad participation of the people in the national government through programs of public information and education, and by providing organizational avenues for various interest groups to participate in the programs of the institutionalized revolution.

There has evolved in Mexico a genuine national society. There is a feeling that the people are the nation's most precious asset and that no segment of the society has a monopoly on ability. Only the most primitive and isolated have not been integrated into the society (see ch. 5, Ethnic Groups and Languages). Some Indians in rural areas and in the south display communal rather than national loyalties, but particularly since the administration of President Lázaro Cárdenas (1934–1940) and the *ejido* (communal land) reforms, these Indian communities have increasingly been brought into the nation. The more Hispanicized northerners and urban dwellers contrast with the more Indian and rural southerners, but the institutionalized revolution has evolved a viable means of meeting the different aspirations of the several groups.

The national society that has evolved derives its homogeneity from the process of *mestizaje* (ethnic and cultural blending of European and Indian) which is virtually complete. Although Spanish is the national language, it has incorporated many Indian roots, place names, and patronymics. Catholicism is the predominant religion, but there exist syncretic practices among Indians and a significant degree of anticlericalism among the PRI and the middle class. Some cultural differences remain, however, and they have been represented by various revolutionary heroes and political figures. Southerners Emiliano Zapata and Lázaro Cárdenas symbolized the Indian tradition of regional loyalty to the *patria chica* (small country); northerners Pancho Villa and Alvaro Obregón espoused the Spanish values of individualism, *machismo* (manliness), and loyalty to a chief or *patrón* (see ch. 3, Historical Setting; ch. 12, Social Values).

Virtually since the Revolution (1910–1917), political power has rested with the PRI. Because it manages to embody and represent a broad spectrum of national interests, it has had no strong opposition. Opposition parties exist and have made some showing in local elections, but their effectiveness seems to lie in demonstrating to the PRI the mood of the people. The National Action Party (Partido Acción Nacional—PAN), the major opposition party, won an important mayoralty election in Uruapan, Michoacán, in December 1968. The PRI discovered its error in trying to impose on local electors its own outside candidate in that case.

As the PRI attempts to embody national interests, so does the president of the country reflect a concensus of the PRI. He does not rule arbitrarily but reflects party policies. It is said in Mexican politics that no matter what the personal political sympathies of a presidential candidate—be they Left or Right—in office he always becomes a Centrist (see ch. 14, Political Dynamics).

Mexico thus presents the picture of a country which has achieved a measure of representative democracy under an oligarchy. For over a generation no significant part of the population has been alienated, and as a consequence Mexico has been the only country in Latin America which has escaped significant political violence for over 40 years of increasing economic and social progress. The prospect for political stability seems perhaps the best in Latin America. Unlike other Latin American countries, Mexico is in little danger of being upset by the military. Although the generals of the revolutionary period played a major role in building the PRI, the military has subsequently played a small and declining part in politics, and the Mexican military budget is one of the smallest in the world, relatively speaking.

The principal source of dissidence seems to be found in the radical Left, in the wave of student unrest which Mexico shares with most other developed and developing societies over the world. The prospect for continued avoidance of significant internal conflict is still a good one, however, because of the highly sophisticated methods traditionally employed by the PRI in dealing with opposition. Although the PRI has demonstrated on occasion a capacity to deal firmly with insurgency, the fundamental approach in recent years has been to treat it as a socio-political rather than a military problem, to work towards the containment of social alienation rather than the repression of insurrection. Thus, Leftists have often been contained by political and economic reform instituted by the PRI (see ch. 14, Political Dynamics).

Economic power in Mexico is divided among four principal groups who also represent the ruling political coalition: communal and individual farmers, organized labor and the functionaries of the party and the government, and the rising industrialists and their commercial and financial allies. This power derives from the land, including both mineral and agricultural resources; the people; and the state. There is a dwindling group of traditional landed elite and former owners of mines and services, many of whom have shifted their residual capital to urban real property development; a rising middle class, some of whom are approaching the status of a new plutocracy; and a large mass, representing the bulk of both rural and urban population. It is for this group that the ongoing Revolution seeks to speak, and the party and the government continue to advance programs of economic reform designed to raise further the economic status of the rank and file.

Building on the social and economic convulsions of the mid-19th century Reforma, the long period of economic development and political stability of the Porfiriato (the long rule of Porfirio Díaz), and the 20th century catharsis of the Revolution, the Mexican economy has largely transisted from the traditional post-colonial land, cattle, and mining economy to a modern, diversified economy, growing at one of the fastest rates in Latin America (see ch. 18, Character and Structure of the Economy).

In this process, some of Mexico's resources have been overexploited and are now seriously depleted. These include fresh and salt water fisheries, wild game and forests. Although Mexico is still the major producer and exporter of silver, zinc, and lead, reserves of precious metals and ores have been significantly reduced. Excessive subsistence farming, especially of maize (corn) on poorer soils and steep slopes, and grazing, both in the semi-arid areas and in the highlands, has resulted in significant destruction of soils and natural vegetative cover. On the other hand, well-conceived programs of flood control, irrigation, drainage, hydroelectric development, management of petroleum and natural gas resources, pest control, and soil conservation seem to more than counterbalance past exploitation (see ch. 19, Agriculture). Only should the rate of population growth continue unchecked would these programs seem likely to fail.

In the 1960's agricultural output has expanded over 1 percent faster than population. The Mexican agricultural potential is considerable, but its development is a difficult, time-consuming, and capital-intensive process, requiring continuing large-scale governmental outlays on irrigation, drainage, transportation, and resettlement. Two-thirds of Mexico's agricultural output is produced on irrigated lands which represent a fraction of the total area under cultivation. The productive agricultural sector is for the most part mechanized with little demand for agricultural labor. Over 40 percent of the population is employed in dry-farming subsistence agriculture; the productive potential of this sector is slight as the farming is carried out on semi-arid lands permanently inaccessible to irrigation. Although this agricultural population has ceased to grow—largely because of migration to the cities—it already exceeds the capacity of the dry-farmed lands to absorb human labor, and agricultural underemployment is a serious and continuing problem (see ch. 19, Agriculture).

Mexican agriculture continues to expand, however, and is not only sufficient to feed the Mexican population but to account for a significant share of export trade. A high proportion of every national budget during the 1950's and 1960's has been devoted to irrigation and land reclamation. During 1961–1965, the production of wheat increased by an average of 14 percent yearly; coffee, by 8.9 percent; cotton, by 4.8 percent; and beans, by 5.7 percent.

The most striking feature of the Mexican economy since World War II has been the growth of the industrial sector. As the war cut off Mexico's access to imported manufactures, Mexican industrialists moved into the vacuum created by land reforms which destroyed the political power of the landed oligarchy and took over effective control of the PRI. At the end of the war Mexican industrialists were in a political position to limit foreign imports by trade restrictions and thus protect Mexican industry. The present contribution of manufactures to gross national product has passed 26 percent, while that of agriculture has declined to less than 11 percent (see ch. 20, Industry).

As Mexican industry continues to expand, its orientation is beginning to change. Before World War II, almost all Mexican imports were consumer goods. Now, around a third of imports are capital goods, a third are raw materials, and less than a fifth are consumer goods. Mexico is beginning to enter the Latin American Common Market and the Canadian market with such capital goods as boilers, drill rigs, and steel office furniture; it has taken over the Caribbean and Central American market for bottles; and has competed strongly with the United States in the cement and steel market (see ch. 23, Foreign Economic Relations).

Another significant change in the orientation of the Mexican economy has been the decline in the relative importance of foreign capital. Mexico is now generating not only most of its own capital for development, but is beginning to assume the role of a capital exporting nation, with its strongest industries establishing overseas subsidiaries. Although ownership of industry remains largely in private hands, industrial growth has received major impetus from public investments in economic infrastructure, particularly power generation and transport. Public financial institutions—notably the Banco de Comercio Exterior and the Banco de México—are supporting Mexican manufacturers in their major role in developing the Latin American Common Market (see ch. 18, Character and Structure of the Economy).

Strong as the impetus to growth in Mexico is, the country has been faced with the need to overcome a social deficit. As agriculture and industry become less labor intensive and the population continues to grow, problems of unemployment and rapid urbanization increase. The country is faced with a continuing struggle to accommodate the fast mounting urban populations, to outpace slums and provide housing, sanitation, electricity, and potable water (see ch. 8, Living Conditions). Much, however, has already been done in the fields of health and education. The ratio of doctors to population is one of the highest in Latin America; effective public health campaigns have been carried out; the cost of medicine is kept under rigid price controls; and dietary supplements are provided to school age children free or at subsidized prices. Educational resources have been mobilized behind development. A high proportion of secondary schools offer vocational, technical, and specialized training related directly to the national program for economic and social progress. Illiteracy has decreased from 65 percent in 1930 to 28 percent in 1968. The government gives a high priority to education; the federal budget in 1968 allocated 26 percent of government funds to this purpose (see ch. 9, Education).

Mexico's foreign relations are conditioned by its strict adherence to the principals of self-determination of all peoples and nonintervention. These principles have led Mexico to take a neutral position on the cold war and to be the only Latin American country to maintain diplomatic relations with Castroite Cuba. As a member of the Organization of American States and of the United Nations, Mexico has supported hemispheric solidarity but has opposed intervention by either of these bodies into the internal affairs of any state (see ch. 15, Foreign Relations).

Mexican foreign policy does recognize the advantages of economic cooperation between sovereign states. It has been an active participant in hemispheric and Latin American plans for economic cooperation—especially in the Latin American Common Market. It has been reluctant to become involved in bilateral aid programs but has engaged in joint development programs with the United States along their common border. While not dependent on foreign aid, Mexico has made successful use of international lending agencies.

Mexico's geography has contributed significantly to shaping the present society (see ch. 2, Physical Environment). The high elevation and geology of the central core area have combined to produce fertile soil and favorable climatic conditions in an area which would otherwise be unable to support a population of any size. The deserts in the north and the mountains and jungles in the south have served to contain the state and aid its survival as an independent nation. The richness of the country's resources made Mexico one of the most important of Spain's colonies. As the colony grew so did the *mestizo* (mixed European and Indian ancestry) spirit; Mexico was the first Latin American country to declare independence from Spain and has exerted considerable influence over the Latin American community since that time.

Spanish cultural influence has combined with the distinct strains which have evolved out of the Chichimec desert cultures of the north and the high Mesoamerican cultures of the center and south to produce the present Mexican society (see ch. 12, Social Values). The two recent events which have had the greatest impact on this society have been Mexico's Revolution during the early part of the century—with its sweeping political, economic, and social changes—and the economic boom—principally industrial in character—following World War II.

Accelerating urbanization and industrialization, the emergence of a substantial and influential middle class, and the concomitant growth of a genuine nationalism appear to be the hallmarks of the new Mexico. Change has been rapid since the 1940's. Whether the rate of change will continue to be exponential or whether Mexico will enter upon a period of social, political, and economic consolidation remains to be seen. The PRI is committed to the ongoing revolution, but its current emphasis on the institutionalized revolution may well indicate a shift of emphasis from change to consolidation. The reemergence of the moderately conservative opposition party, the PAN, on the one hand, and demonstrations by the radical Left on the other may both be symptoms of a tendency toward readjustment in the polity. The Mexican people in general support their government; all are proud of their nation.

CHAPTER 2

PHYSICAL ENVIRONMENT

Mexico has been, and is being, shaped by its physical circumstances. The geology and high elevations of the central mesa and its flanking highlands have produced an enclave of healthy and fertile lands in an area which would otherwise tend to be too hot and alternately too wet and too dry for optimum human occupancy. It is this area which has been and remains the core of the state. On the other hand, the desert and mountain barriers separating the Mexican coreland in the Valley of Mexico (Anhuac) and its associated central zone from the oases and subtropical areas of southwestern United States were among the reasons that the Mexican political state proved unable to retain these outlying areas. Similarly, with the end of the Spanish Empire on the mainland of the New World, the isolated corelands of Central America, cut off by mountains and jungle, could not be retained in the emergent Mexican state. The evolution of the national territory has been a matter of establishing the effective span of control of a society based primarily on the Mexican central zone and those areas which could be effectively connected to it.

Many of Mexico's land forms are dominated by the Cordilleran (Laramide) system of mountain ranges (to which both the South American Andes and North American Rocky Mountains belong), and the associated Gulf Coast Embayment. The peninsula of Baja California, the Gulf of California and the Sea of Cortés, the Sierra Madre Occidental and the coastal highlands of Guerrero, Oaxaco, and Chiapas are wholly or largely products of the on-going Coast Range geological activity that is part of the contemporary "Ring of Fire" around the Pacific Ocean basin, characterized by active vulcanism and violent crustral movements. In Mexico, the most spectacular recent event of this sort was the eruption of the new volcano, Paricutín, in 1943. While Mexico belongs to the North American continent, it also is physically and geologically the bridgehead to South America since the present Central American landbridge was built out of the volcanic activity of the Coast Range.

Between the Cordilleran ranges is the elevated plateau, extending from north of the Balsas depression (in present Guerrero and Southern Puebla) northward into the southwestern part of the United

States. The southern part of this area is known as the central mesa and contains the Valley of Mexico.

Mexico falls into three basic climatic regimes: the arid north; the tropical lowlands of the east, south, and west coasts; and the temperate and cool tropical uplands of the central zone and parts of the south, where most of the people are concentrated. For the most part, Mexico's native flora and fauna are of North American origins, but there has been a significant backflow of South American species. The North American life forms tend to be predominant in the key central highlands.

Except for petroleum, coal, and sulfur, and some residual iron and aluminum deposits, the bulk of mineral resources are associated with the Cordilleran structural system, the Sierra Madres, both Oriental and Occidental. Mineral deposits in the Coast Range structures of the west and south are far more sparse. Mexican petroleum and sulfur, as in the adjacent parts of the Texas and Louisiana areas, are associated with the Gulf Embayment. Mexico's relatively scarce bituminous coal is also associated with the Gulf Embayment in Nuevo Leon and Tamaulipas.

Human geography divides into several main elements: 1) the coreland in the central zone, essentially the Valley of Mexico, with its extensions into the tropical lowlands around Veracruz, and into the northwestern part of the central zone around Guadalajara in Jalisco; 2) the humid and wet and dry tropical areas of the south (Veracruz, Oaxaca, Tabasco, Campeche, Yucatán, and Quintana Roo), the stronghold of persisting Indian influence; 3) the dry sub-tropical lowlands of Tamaulipas and Nuevo León, with its independent secondary core focusing on Monterrey; 4) the wild dry land pastoral area of Chihuahua, interior Sonora and Baja California; and 5) the irrigated areas of the north both along the Río Grande (Río Bravo) and Colorado River and along the Pacific Coast.

BORDERS AND POLITICAL SUBDIVISIONS

From El Paso and Ciudad Juárez to the Gulf of Mexico, the boundary between the United States and Mexico is formed by the main channel of the Río Grande (Río Bravo del Norte) (see fig. 1). Such a boundary has the advantage of being a definite, clearly visible feature, but since it is a dynamic and still active physiographic feature, it has some disadvantages. However, with a determination on the part of the two neighboring nations to solve their problems amicably, and with joint agreements for the development of the irrigation and hydroelectric potential of the system, and a joint flood control program, this frontier seems unlikely to generate any future problems related to its physiographic character.

From El Paso west, the border, except for a short stretch of the lower Colorado, which serves to separate Arizona from the northeast corner of Baja California, follows an arbitrary surveyed line, marked on the ground only by surveyors' monuments and a zone of cleared vegetation.

The use of the river for a boundary splits certain areas into two parts, inhibiting unified development. The part of the frontier that includes the twin cities of El Paso and Juárez has relatively minor problems. More serious are those associated with the lower Colorado River and the irrigated lands of northeastern Baja California. Heavy exploitation of the waters of the river upstream within the United States has the effect of raising the salinity level of the waters in the delta to an unacceptable level for optimum irrigation use in Mexico. The problem is being studied, and it is believed an acceptable solution can be found. A lesser set of problems grows out of the fact that the Tijuana area of Baja California Norte is effectively an overflow of the San Diego urban complex of Southern California. Effective community action by the inhabitants of Baja California and the cooperation of United States federal authorities, California state authorities and the communities of Chula Vista and San Diego have gone a long way toward developing a viable and mutually beneficial set of local international arrangements there.

There has been considerable movement of peoples across the frontier ever since its establishment. During much of the period, the lure of higher wages on the United States side has drawn Mexican farm workers across. Much of this movement has been overt and a matter of contract labor or formal immigration into the United States. Similarly, expatriate North Americans have often congregated in the Mexican border towns, attempting to evade extradition back into the United States. The problems associated with these phenomena are markedly receding and the Mexican government has undertaken a well-conceived and, on the whole, successful program of rehabilitating the communities of its frontier zone. Cooperation between the two national governments in control of smuggling and illegal immigration is also growing in effectiveness.

Mexico's southern boundary is with Guatemala and with British Honduras (Belize). Except for the segment from the Interamerican Highway to the Pacific, the frontier with Guatemala traverses almost uninhabited wasteland. Similarly, the boundary along the Hondo valley with Belize goes through country with few people and little economic significance. Although there are extant, but quiescent border disputes with both Guatemala and Belize, none are active, and there are no current problems, either economic or political, which generate significant trouble on either of the southern frontiers. Should Guatemala attempt to press its disputed claims on the British, Mexico is then likely to press its claims on Belize.

There are 29 states in the Mexican Federal Union, two territories and a federal district. For statistical and some administrative purposes the Mexican government has grouped these into five regions. The North Pacific Region contains Baja California Norte, Baja California Sur (territory), Sonora, Sinaloa, and Nayarit. The Northern Region contains Chihuahua, Coahuila, Nuevo León, Tamaulipas, Durango, Zacatecas, and San Luis Potosí. The Gulf Coast and Yucatán Region contains Veracruz, Tabasco, Campeche, Yucatán, and Quintana Roo (territory). The South Pacific Region contains Guerrero, Oaxaca, Chiapas, and Colima. The Central Region (Central Zone) contains Aguascalientes, Jalisco, Guanajuato, Queretaro, Hidalgo, Michoacán, Mexico, Distrito Federal (Federal District), Morelos, Tlaxcala, and Puebla.

The Northern Pacific Region comprises about 21 percent of the land area of Mexico, but only has some 6 percent of its population. Its irrigated agriculture is playing an increasing role in the economy. The Northern Region includes some 40 percent of the land area but has less than 20 percent of the national population. Here, too the recent upsurge in agricultural production and in heavy industry is increasing the significance of the region. The Gulf Coast and Yucatán Region includes some 12 percent of the national land area, and somewhat over 12 percent of the population. New developments in the Gulf Coast are tending to rehabilitate this slowly developing sector of the country. The rugged South Pacific region also comprises some 12 percent of the land area of the republic, but includes more than 14 percent of the people, concentrated especially in Oaxaca. The Central Region, Mexico's heartland, includes only 14 percent of its area, but has nearly half of all its people.

NATURAL FEATURES

Major Terrain Features

The land forms of Mexico break into a western set, and a central and eastern set. However, there is not any clean separation between them. Terrain is both highly complex and highly significant to the historical development and present characteristics of the Mexican society, polity, and economy. Generally, Mexico consists of the arid and sub-tropical lowlands of the central and southern coasts. The north is then subdivided into: the Gulf Coastal Plain of Tamaulipas and Nuevo León; the Mesa del Norte, the arid and lower northern part of the central plateau, extending from the northern parts of San Luis Potosí and Zacatecas, and the eastern part of Durango, to Coahuila and eastern Chihuahua; the folded and faulted ridges of the northern part of the

Sierra Madre Oriental, which bound the plateau to the east; the dissected low eastern edge of the plateau which continues north of Monclova to the United States' border; the high and rugged and deeply dissected volcanic flows of the Sierra Madre Occidental, which bounds the western side of the Mesa del Norte; the basin and range country of Sonora, west of the Sierras; the interrupted alluvial lowlands of the coastal plain along the eastern shores of the Gulf of California (Vieja California), with its pockets of lowland along both the Pacific and Gulf of California coasts (see fig. 2).

Generally speaking, the fauna and flora reflect the arid climate and are characterized by a preponderance of North American species over South American. The principal deposits of metallic ores are found in the Mesa del Norte and the associated Sierras, although there are some deposits in the basin and range country of Sonora and in Baja California. Fossil fuels, both petroleum and bituminous coal, however, are associated with the sediments of the eastern part of the plateau and the Gulf Coastal plain.

Central Mexico is mostly a matter of the Mesa Central, the southern part of the central plateau, and its associated features. On the east and west are the southern part of the Sierra Madres, Occidental and Oriental, and discontinuous coastal lowlands beyond along both coasts. Along the southern edge of the Mesa Central is the great transverse volcanic range, which together with the Balsas Depression to the south, cut Mexico into two parts. This barrier has been more significant in post-conquest than in pre-Columbian times, since it was a less formidable obstacle to runners and porters than to wheeled vehicles. The top of the plateau, especially in its southern part, is characterized by a series of dry or lake-filled basins; some, like the Valley of Mexico itself, are without natural exterior drainage. Others like the Bajío and Guadalajara, Puebla, San Juan, Actopán, and Tulancingo, are drained by streams penetrating the Sierras to the Gulf or Pacific Coasts. The climates of the uplands are temperate, though there are spots that are semi-arid, or even, on the higher peaks, cool and moist. The lowlands are hot, moist on the coasts, and dry in the interior Balsas Depression. Minerals were associated with the Sierra Madre Occidental and Oriental and the Balsas Depression in Indian and Colonial times, but have mostly been mined out, except for a few gold and silver mines.

The south is composed of six principal subregions: the Sierra Madre del Sur; the Mesa del Sur; the mountains of Chiapas; the Isthmus of Tehuantepec; the southern extension of the Gulf Coastal Plain; and the Yucatán Peninsula. Very few of the uplands are high enough to have extensive areas of cool and moist climate or even very much semi-arid. Most of the area is hot and wet or hot and dry. Although North America fauna and flora are still prominent, more South American species are found, especially to the south of the Isthmus of

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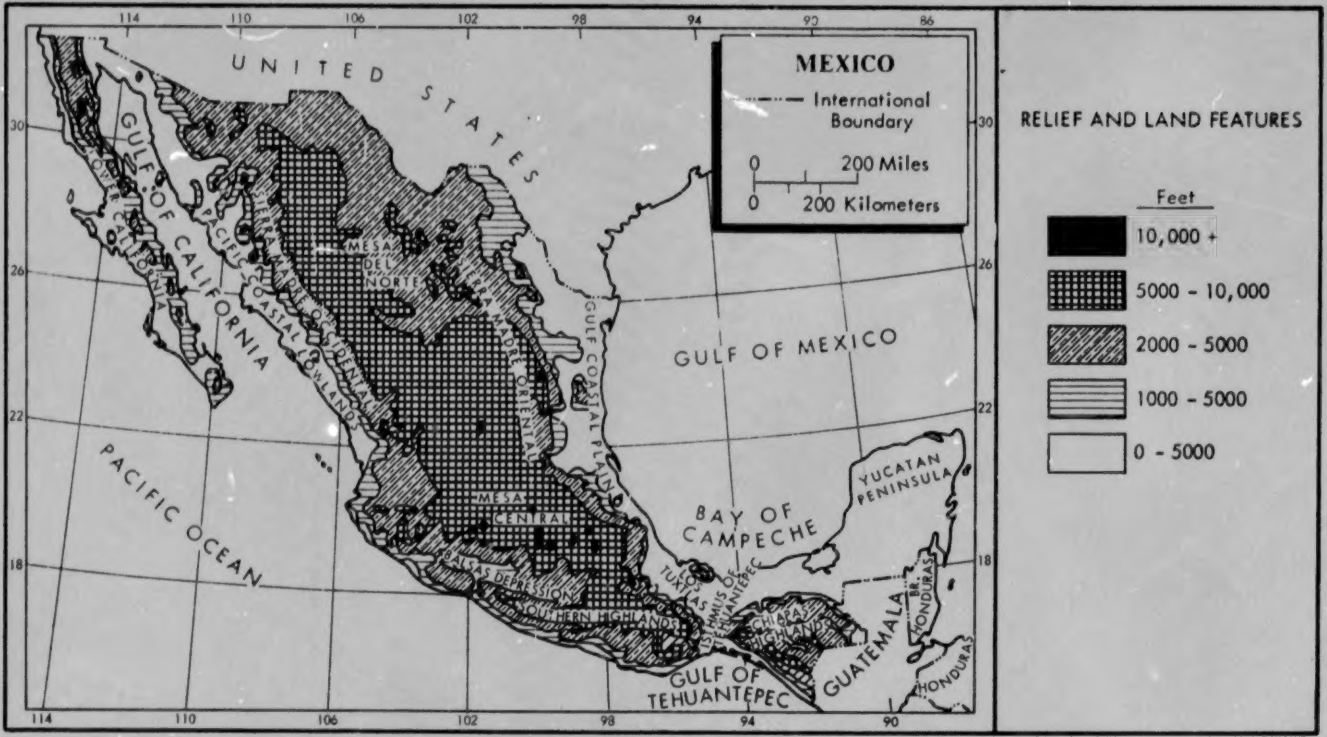

MEXICO
International Boundary
0 200 Miles
0 200 Kilometers
RELIEF AND LAND FEATURES
Feet
10,000 +
5000 - 10,000
2000 - 5000
1000 - 5000
0 - 5000
UNITED STATES
GULF OF MEXICO
BAY OF CAMPECHE
YUCATAN PENINSULA
PACIFIC OCEAN
GULF OF CALIFORNIA
LOWER CALIFORNIA
PACIFIC COASTAL LOWLANDS
SIERRA MADRE OCCIDENTAL
SIERRA MADRE ORIENTAL
MESA DEL NORTE
MESA CENTRAL
GULF COASTAL PLAIN
BALSAS DEPRESSION
SOUTHERN HIGHLANDS
LOS TUXTLAS
ISTHMUS OF TEHUANTEPEC
CHIAPAS HIGHLANDS
GULF OF TEHUANTEPEC
GUATEMALA
BR. HONDURAS
HONDURAS
114
110
106
102
98
94
90
86
30
26
22
18

Figure 2. Topography of Mexico.

Tehuantepec. Petroleum and sulfur are found in the Gulf Lowlands, in an occurrence similar to that of the Louisiana Gulf Coast, and some mercury is mined in Guerrero, but generally the mineralization is sparser in the south.

Soils

Just as Mexico has great diversity in its terrain and geologic structure, as well as its climate, so too it has a great diversity of soils. Nevertheless, the soils of Mexico divide generally into five great groups related to climate and relief; the soils of the humid or subhumid tropics; the soils of the deserts and semideserts; the soils of the wet or wet and dry tropics; the soils of the temperate uplands; and the undeveloped soils (lithosols) or rugged, mountainous, or hilly terrain, of recent volcanic debris, or of the related young alluvial soils. The soils of the arid to semi-arid areas are characterized by calcification (lime accumulating). These are found in northern Mexico and drier parts of the central and southern uplands. Laterization (accelerated leaching) is characteristic of the humid and warm areas and the coastal lowlands of the hot and wet zone. There is limited leaching of the surface layers in the relatively humid to humid uplands; these soils have almost never developed to an infertile extreme. Thus the most successful agriculture in Mexico has been localized on immature or submature soils.

Atypical soils are those which have developed in Tamaulipas, the low-lying parts of Nuevo León, the northern Veracruz, and in the Petén district of southern Yucatán. These soils are lime accumulating because of an unusually high original lime content in the parent material. Other atypical soils are the brown forest soils of northern Baja California's mountains and the soils of coastal Tabasco and Campeche, which are relatively infertile soils, very low-lying and hence waterlogged. The rocky soils of the more rugged terrain tend to resemble the more mature soils of their climatic regime, but are typically thin and difficult to till. The new alluvial soils, where the parent material is relatively well endowed with plant foods, are often very fertile, but where elevated and exposed to weathering for a significant period, they rapidly acquire the soil characteristics expectable in their climatic circumstances. On the whole, in Mexico, agricultural prospects are rather more a matter of surface configuration and available water than of soil type. However, locally, variations of soil fertility, or tillage characteristics have had, and still continue to exert, a significant effect on settlement and economic success. It is also true, especially in the south, that long-continued exploitation of relatively infertile soils or soils on steep slopes has led to a significant reduction in initial soil fertility, or to excessive erosion and the exposure of relatively infertile subsoils.

Climate

As with soils, the basic pattern of climates in Mexico follows the variation of terrain (see fig. 3). On the whole, northern Mexico falls within the area of the arid and semi-arid climates, except for a small area of Mediterranean (dry subtropical) climate in the extreme north of Baja California, and a somewhat larger area of humid subtropical climate in the eastern part of the coastal lowlands on northern Tamaulipas and Nuevo León. Similarly, southern Mexico tends to fall within the tropical savanna (wet and dry). Only along the Tabasco-Campeche coast and the Petén piedmont are there true rainy tropical climates. However, in the highlands, throughout the country, there are small patches, and sometimes large areas of climates of the mid-latitude type (for example, in the temperate areas) and are cool and moist. Since altitude is such a major determinant, this temperature-based pattern is often very complex within a given locality. Similarly, the mountainous terrain often produces local "rain shadow" dry areas (for example, the eastern Mesa Central, or the Balsas Depression) or "rain trap" (for example, the seward slopes of the mountains) effects.

Mexico's basic climatic pattern stems from its latitude, its funnel shape, its variation in altitude, and the orientation of its highlands. While all of Mexico lies in the same latitudes as the great desert belt of North Africa and the Middle East, only in the wide north, in Baja California and the northwestern part of the mainland does true desert climate occur in Mexico. Even the somewhat larger areas of bordering semi-arid climates are confined to the north, except for localized areas of "rain shadow" on the leeward sides of the central highlands.

The most densely populated and productive parts of Mexico fall right in the center of the normal zone of influence of the tropical high pressure belt, partly because of the alternation of wind and moisture patterns by the adjacent seas and oceans. This results in bringing moisture to the east coast, both by extension northward of the effects of the moisture bringing Northeast Trade Winds in the summer, and extension southward of polar outbreaks off of the North American continent in the winter. These latter normally dry winds pick up moisture over the Gulf of Mexico and are the cause of both the Tehuantepec Storms of Mexico and the similar Papagayo Storms of Honduras and Nicaragua. Although Mexico lies outside of the main path of the summer and fall Atlantic hurricanes, their Pacific analogues (*cordonazos* or *chubascos*) bring significant amounts of moisture to the Mexican west coast. In some sense, all of these phenomena can be ascribed to the weak North American monsoons, in which the generation of generally low pressures over central North America in the hot summer and early fall tend to induce northward flows, while the continental high pressures of winter and early spring tend to push

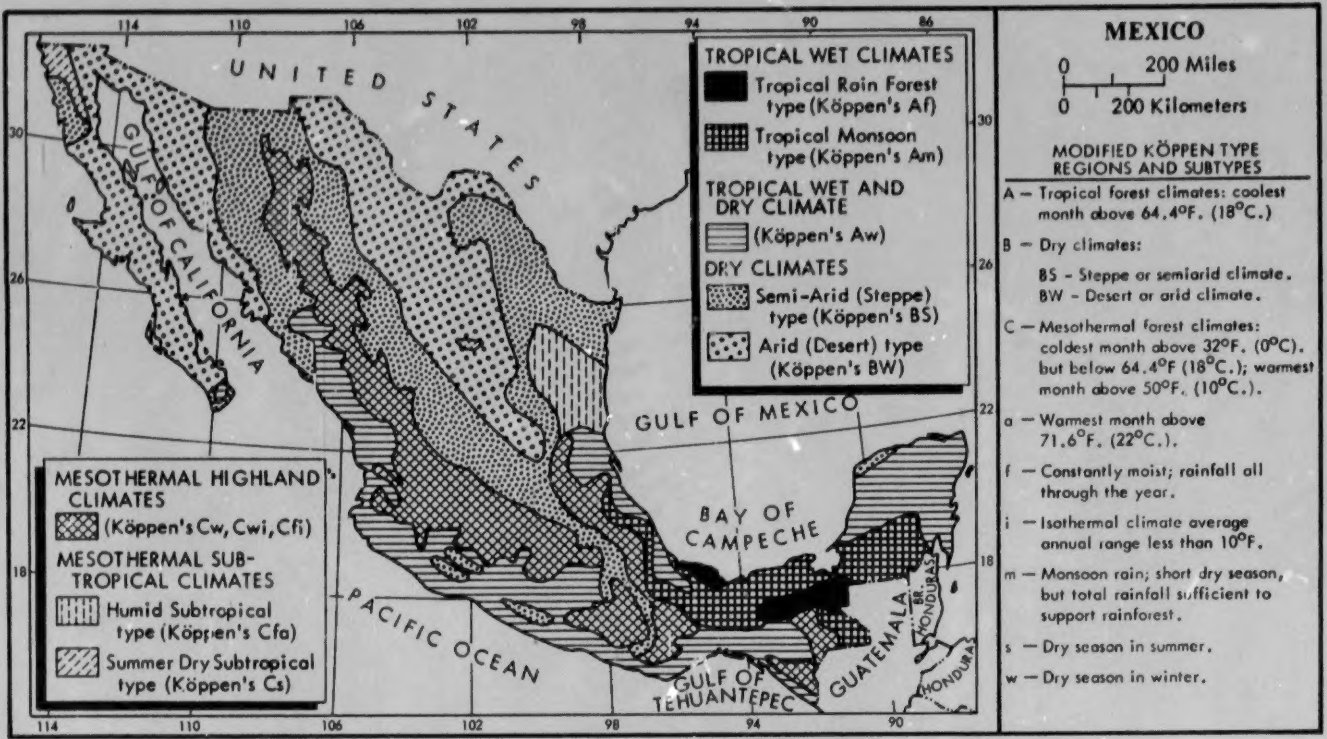

MEXICO
0 200 Miles
0 200 Kilometers
MODIFIED KÖPPEN TYPE REGIONS AND SUBTYPES
A — Tropical forest climates: coolest month above 64.4°F. (18°C.)
B — Dry climates:
BS - Steppe or semiarid climate.
BW - Desert or arid climate.
C — Mesothermal forest climates: coldest month above 32°F. (0°C). but below 64.4°F (18°C.); warmest month above 50°F. (10°C.).
a — Warmest month above 71.6°F. (22°C.).
f — Constantly moist; rainfall all through the year.
i — Isothermal climate average annual range less than 10°F.
m — Monsoon rain; short dry season, but total rainfall sufficient to support rainforest.
s — Dry season in summer.
w — Dry season in winter.
TROPICAL WET CLIMATES
Tropical Rain Forest type (Köppen's Af)
Tropical Monsoon type (Köppen's Am)
TROPICAL WET AND DRY CLIMATE
(Köppen's Aw)
DRY CLIMATES
Semi-Arid (Steppe) type (Köppen's BS)
Arid (Desert) type (Köppen's BW)
MESOTHERMAL HIGHLAND CLIMATES
(Köppen's Cw, Cwi, Cfi)
MESOTHERMAL SUB-TROPICAL CLIMATES
Humid Subtropical type (Köppen's Cfa)
Summer Dry Subtropical type (Köppen's Cs)
UNITED STATES
GULF OF CALIFORNIA
GULF OF MEXICO
BAY OF CAMPECHE
PACIFIC OCEAN
GULF OF TEHUANTEPEC
GUATEMALA
BR. HONDURAS
HONDURAS
114
110
106
102
98
94
90
86
30
26
22
18

Figure 3. Climate of Mexico.

the whole system of air masses to the south. However, because the principal moisture sources lie to the east, given the prevailing wind patterns, and thus the entire west coast lies generally in a seasonal "rain shadow."

The tropical, wet climates of the southern and eastern slopes of the Sierra Madre and the Mesa del Sur, the coastal areas of southern Veracruz and Tabasco, and of the Petén are only occasionally and locally continuously wet enough to approximate true rainforest conditions. For the most part, these are monsoonal tropical climates, with a drier season in the winter. The rest of the hot and wet climates, in central and northern Veracruz, in northern Yucatán and Quintana Roo, and along the Pacific coast, from Sinaloa to the Guatemalan border and a smaller highland area in Baja California, are tropical wet and dry climates, with a marked and prolonged winter dry season, and heavy summer rains. The dry climates of the north include two sizable areas of tropical desert and two smaller areas of cooler subtropical desert. The first of these latter are the deserts of central and southern Baja California, and the second is an area in northern Chihuahua, centered on Ciudad Juarez. The smaller of the two areas of hot desert includes the northwestern part of Sonora and the northeastern coast of the Baja California peninsula. The most extensive area of hot desert occupies the eastern third of Chihuahua, western Coahuila, the northwestern corner of Durango, and the northern tips of Zacatecas and San Luis Potosí. The cool desert in west central Baja California gets most of its sparse rainfall in summer. The rest of the desert areas receive most of the rain in the form of violent winter thunderstorms. The semi- arid areas border the true deserts except "rain shadow" areas of the eastern Mesa Central and the Balsas Depression.

The more important occurrences of humid subtropical climates, however are those of Mexico's highlands. These include a small area of mediterranean climate, with a moist cooler winter and dry hot summer, in the sierras of Baja California del Norte. Most of the upland temperate climates however are either of the dry winter or generally moist types. In the north there is generally a distinct variation between hot summers and cool winters, but in the south these climates tend to be isothermal, with less than 9° F. annual temperature range. The cooler climates, in which the average temperature of the warmest months does not exceed 71.6° F., are confined to the upper parts of: the Sierra Madre Occidental, the Sierra Madre and Mesa del Sur, and the upper slopes of some of the peaks in the Neovolcanic Range. The largest of these latter areas is found around Mexico's highest mountain, Citlaltepec (18,209 feet).

More significant, as well as more widespread, are the warm subtropical climates. The dry winter type is more widespread, the moist climates being generally confined to the "rain traps" of the windward slopes of the higher ranges of the center and north, and to the tropical highlands of Chiapas and Guerrero. It is the former type which is dominant in the Mexican coreland in the Mesa Central. Both in that area and the strips which follow the Sierra Madre Occidental and Oriental into northern Mexico, the pattern is toward the dry margin of the temperate type of climate. But further south, in Oaxaca and Chiapas, even though the winters are drier than the summers, the overall levels of rainfall are high. There are very limited areas near the top of the highest of the volcanic peaks where the climates are comparable to those of the northern midlatitudes or even the polar climates.

Hydrology

Mexican hydrology is largely conditioned by terrain, soils, and climate, but there are significant areas where the underlying rock materials have significant hydrologic effects (see fig. 4). The most notable of these are the subsurface drainage phenomena associated with underlying limestones, but locally, both sandstones, and even more commonly, porous volcanic rocks (tuffs, etc.) act as important waterbearing layers. In many alluvial areas at the foot of the highlands or in basin fills, there are sizable accumulations of subsurface water. Nevertheless, the crux of Mexican hydrology is related to surface run-off, in perennial or intermittent streams and storage on natural or artificial lakes. Only two major river systems affect Mexico and then only slightly; these are the delta of the Colorado in the west and the middle and lower part of the Río Grande (Río Bravo) system in the northeast. There are significant areas of interior drainage in central and northern Mexico, and the most important area of subsurface drainage is in Yucatán and Quintana Roo. The rest of Mexico has normal exterior drainage into the Atlantic or the Pacific—the shorter, intermittent streams characterizing the western drainage, and longer, perennial ones, the eastern.

NATURAL VEGETATION

There is great variety in the natural vegetation of Mexico, ranging from cool climate species to tropical types, and from desert to rainforest and swamp vegetation (see fig. 5). The dryland species are found mainly in the north, the tropical in the south, and the cool climate types in the uplands. The physiographic diversity of Mexico tends to blur these distinctions, and local conditions often govern the vegetative complex. In the north there tends to be a differentiation between west coast forms and eastern forms; in the south these distinctions tend to disappear and altitude and microclimates, soils, and underlying rocks tend to be more important.

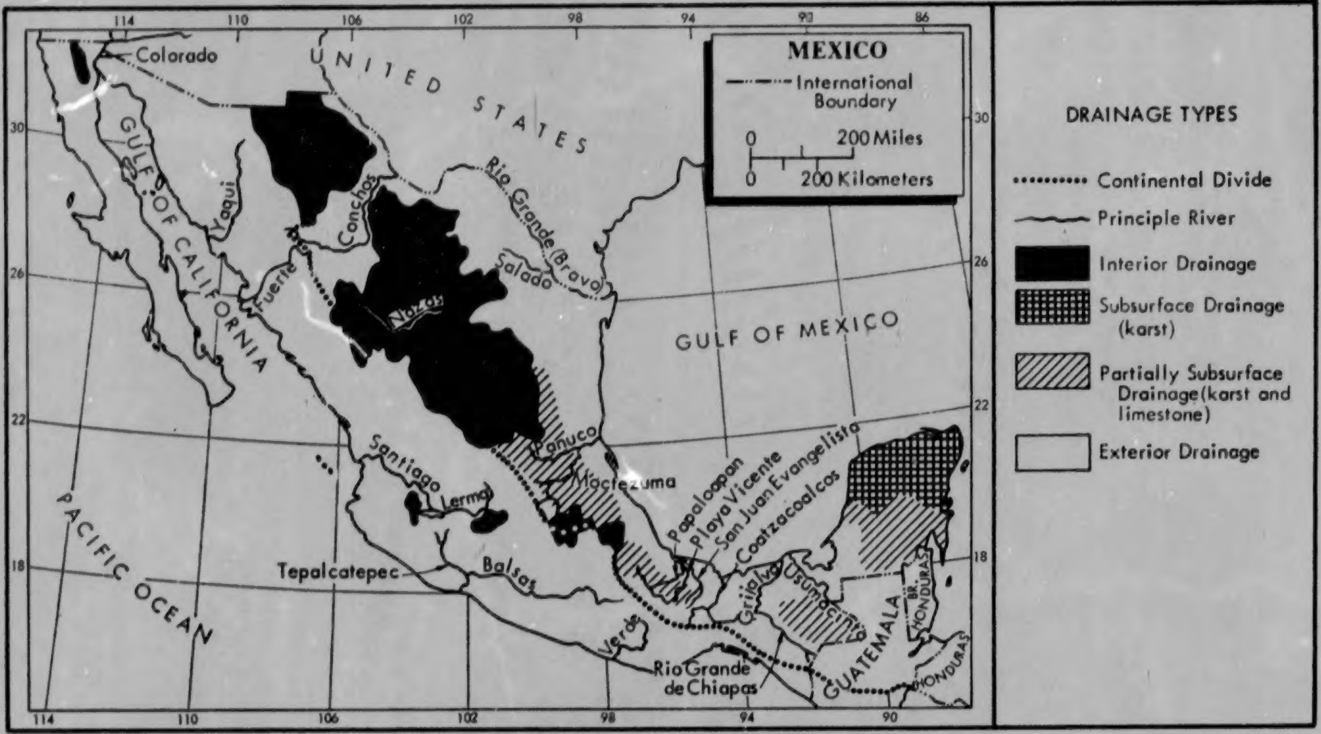

MEXICO
International Boundary
0 200 Miles
0 200 Kilometers
DRAINAGE TYPES
Continental Divide
Principle River
Interior Drainage
Subsurface Drainage (karst)
Partially Subsurface Drainage (karst and limestone)
Exterior Drainage
UNITED STATES
GULF OF MEXICO
GULF OF CALIFORNIA
PACIFIC OCEAN
GUATEMALA
BR. HONDURAS
HONDURAS
Colorado
Yaqui
Conchos
Fuerte
Rio Grande (Bravo)
Salado
Nazas
Panuco
Moctezuma
Santiago
Lerma
Tepalcatepec
Balsas
Verde
Papaloapan
Playa Vicente
San Juan Evangelista
Coatzacoalcos
Grijalva
Usumacinta
Rio Grande de Chiapas
114
110
106
102
98
94
90
86
30
26
22
18

Figure 4. Hydrology of Mexico.

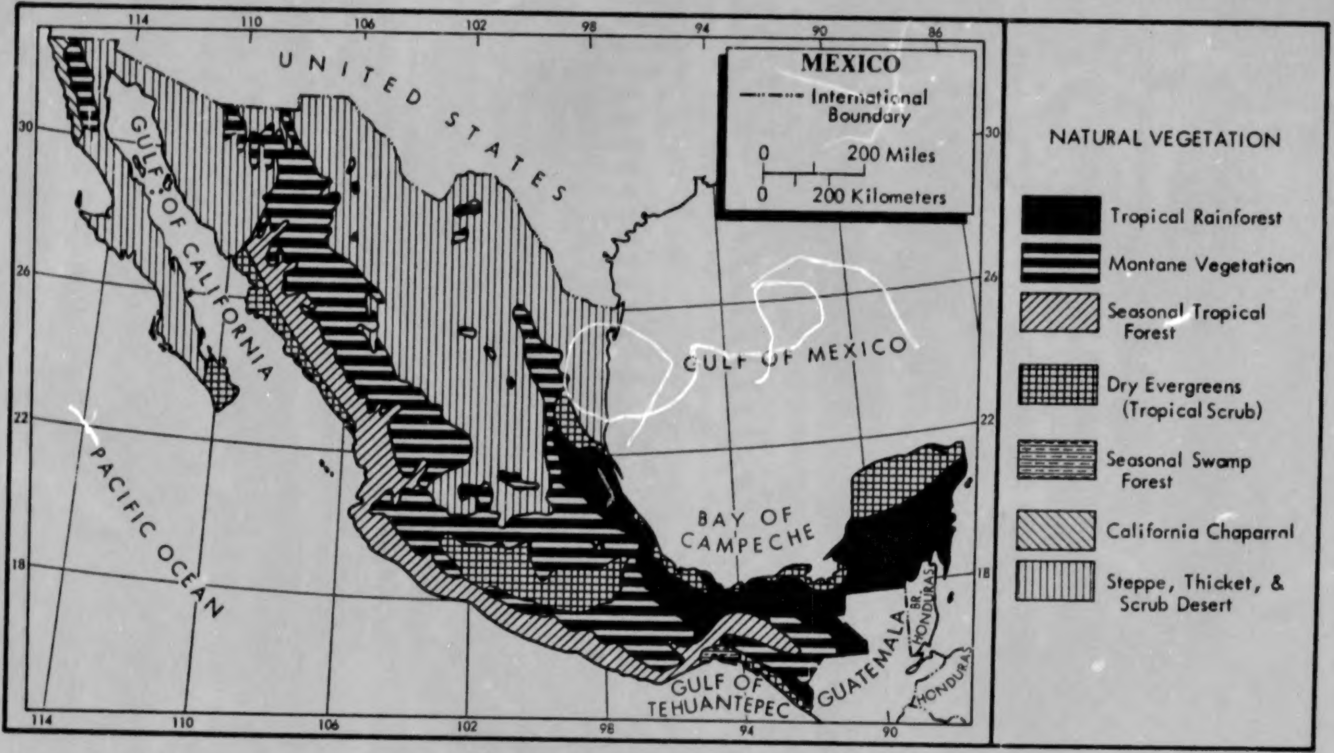

MEXICO
International Boundary
0 200 Miles
0 200 Kilometers
UNITED STATES
GULF OF CALIFORNIA
PACIFIC OCEAN
GULF OF MEXICO
BAY OF CAMPECHE
GULF OF TEHUANTEPEC
GUATEMALA
BR. HONDURAS
HONDURAS
114
110
106
102
98
94
90
86
30
26
22
18
NATURAL VEGETATION
Tropical Rainforest
Montane Vegetation
Seasonal Tropical Forest
Dry Evergreens (Tropical Scrub)
Seasonal Swamp Forest
California Chaparral
Steppe, Thicket, & Scrub Desert

Figure 5. Natural vegetation of Mexico.

In the northern portion of the Baja California Peninsula, especially on the western slope, there is a small area of Mediterranean type *chaparral*, with true sages as well as sagebrush, scrub oak, live oak, "mountain mahogany", coastal (closed cone) pines, manzanita and the like. Farther south on the peninsula and in the arid or semi-arid parts of Sonora and Sinaloa west of the Sierra Madre Occidental, there is a sparse evergreen vegetation resembling that of California's Mojave Desert and western Arizona. Scattered evergreen shrubs, succulents—especially many varieties of cactus, including the impressive saguaro—and ephemeral flowering plants after the rare but intense desert thunderstorms or the rarer Pacific hurricane. On the extreme southern tip of the peninsula, there is a small area of deciduous vegetation of similar characteristics. The upper slopes of the Sierra Madre Occidental are covered with a sparse growth of conifers, mostly pines in small open groves or as single trees, but with some fir and denser stands of pine in higher, wetter locations.

The vegetation of the Mesa del Norte and the northern, inland slopes of the Sierra Madre Oriental is composed primarily of dryland vegetation, but with a number of deciduous broadleaf shrubs and scattered trees. Except for local areas of wetter and cooler upland, this pattern obtains in the central mesa as well. The coastal lowlands of Tamaulipas have a somewhat similar vegetative cover, but with more trees along the watercourses, and with grass in bunches in many of the intervening spaces between the shrubs of trees. In the higher areas of the Sierra Madre del Sur, the Mesa del Sur and the higher parts of the Sierra Madre de Chiapas, the vegetation is a mixture of needleleaf conifers, mostly pines, but with firs and oaks in the cool, moist uplands. Northern Yucatán and Qintana Roo have only scattered deciduous and evergreen shrub, for the most part. The rest of the Pacific and Atlantic coastal lowlands tend to be dominated by semideciduous "jungle" type broadleaf semideciduous forest, or the thickets of regrowth in areas where traditional "slash and burn" agriculture has operated on too short a cycle. Genuine tropical rainforests are found in part of the Petén and Chiapas, but these too have sometimes been cut back to tropical brush by excessive exploitation.

NATIVE FAUNA

Nearly all main groups of tropical and midlatitude vertebrate and invertebrate animal groups are found. Probably the bulk of the wild land animals are of North American origins, but a significant backflow of South American species from tropical Central and South America has occurred. The Isthmus of Tehuantepec serves in several respects as a boundary between the areas dominated by North American fauna, and the area of more equal mixture in Central America. Chiapas and the Yucatán Peninsula, together with the contiguous highlands of

Central America, are a similar border zone in which tropical species are dominant but some North American types are represented. Nevertheless, there is a tendency for tropical species to follow the lowland, hot, moist areas northward in the coastal lowlands of southern and central Mexico.

Some tropical mammalian species such as the common oppossum, the armadillo, and the collared peccary have made their way northward into the southern United States. On the other hand there are no primates north of southern Mexico. Conversely such northern species as the cougar (puma, mountain lion), bobcat (lynx), gray fox, and whitetailed deer have tended to follow the cooler regions of the highlands south. Similar patterns to these are found among other vertebrates, including reptiles and amphibians, but are more blurred among the highly mobile and often migratory birds. The pattern of distributions among both terrestial and marine invertebrates are both highly complex and less well understood than that of the higher animals, but appear to be somewhat similar.

Much of this diverse fauna, on land, in the streams and lakes, and in the adjacent seas, has been profoundly altered by man. Humans have, since pre-Conquest times, exploited many of these species for food, for hides, or feathers, and increasingly, in recent times waged war on species seen as health hazards or economic pests. Man has also introduced many Old World elements into the area; among those deliberately introduced are the domestic animals (cattle, horses, sheep, goats, chickens, etc.) and such fish as carp, while among those unwittingly introduced are the common rat and mouse, the starling, the house sparrow, the *Aedes* mosquito of yellow fever and *plasmodium*, the causative organism of malaria. Animals once, but no longer, found in Mexico include the American Bison, and the pronghorn antelope and the quetzal; the parrots have been much reduced. On the other hand, the present surge of development in the tropical lowlands of Mexico is largely a matter of bringing the disease-carrying anopheline and *Aedes* mosquitos under control.

Of particular importance to Mexican man have been the fisheries of both the inland and coastal waters. With the dessication of many lakes in the Central Highlands, and the artificial drainage of others, as well as continued pressure on the remaining resources, this is waning in importance. The abundant mollusks and crustaceans as well as the fish and marine turtles of both shores continue to be both an important source of subsistence for coastal dwellers and an increasingly important food source for the interior dwellers, as well as a source of exports (especially shrimp). The fisheries of tuna, bonita, mackerel, sardines, and swordfish in the cool waters off Baja California, have been a very important source of fish, but most of the vessels have been North American, serving the markets of the United States (see ch. 20, Industry).

MINERAL RESOURCES

Minerals have been of particular significance in Mexico's history and in the evolution of its economy. Antillean Indian accounts of Mexican gold reportedly led to the first Spanish expeditions to the Mexican mainland from Cuba and Santo Domingo. Most of the early Spanish expeditions out of the conquered Valley of Mexico many of the early *encomiendas* (feudal fiefs), and much of the forced labor of Indians was related to the search for gold and silver. Similarly, during the later Spanish Colonial period the principal freight, in terms of value, was in precious metals, but by then largely silver. Much of the agricultural settlement of the Mesa del Norte was initially to provide food for the mine and smelter workers.

It was Mexico's fabled mineral wealth which is reported to have led Napoleon III into his ill-fated adventure in the mid-19th century, and it was Mexico's minerals which later attracted most of the foreign "economic imperialists." Even in the period after World War I, it was disputes over foreign ownership of Mexico's mines and oil wells which led to most of the friction between the United States and Mexico, and one of the major goals of the Revolution from 1910 on was the recapture of ownership of the national mineral resources (see ch. 3, Historical Setting). In spite of all of this, Mexico's mineral resources were and are concentrated in a relatively few kinds of ores and deposits, and the country is relatively or absolutely lacking in certain other minerals of particular importance to a modern commercial-industrial society (see fig. 6).

As late as 1940, gold, and then silver, were by far the leading items by value in Mexican mineral production, but they have been generally decreasing in importance in this century, and especially since World War II. In only one significant area, in the Balsas depression, is gold mining as such still a major economic activity. The rest of the placering areas have been essentially mined out, and no really significant lode deposits have ever been found in Mexico. A significant production of gold does still come as a byproduct from silver mining, or the exploitation of complex sulfide ores, mined primarily to recover lead and zinc.

Most of the initial settlement of northern Mexico by the Spanish Colonials and the Indian and *mestizo* laborers they brought with them were related to the exploitation of the great silver belt from Zacatecas to Ciudad Chihuahua. Later lines of settlement were related to silver deposits in northern Zacatecas and Nuevo León and western Durango and Sonora. Many o fthe old silver workings are virtually exhausted, but some are still in operation in Durango and Chihuahua, and the old Taxco mines (among the earliest) still are marginal producers. Among recently abandoned workings are those of Ocampo in

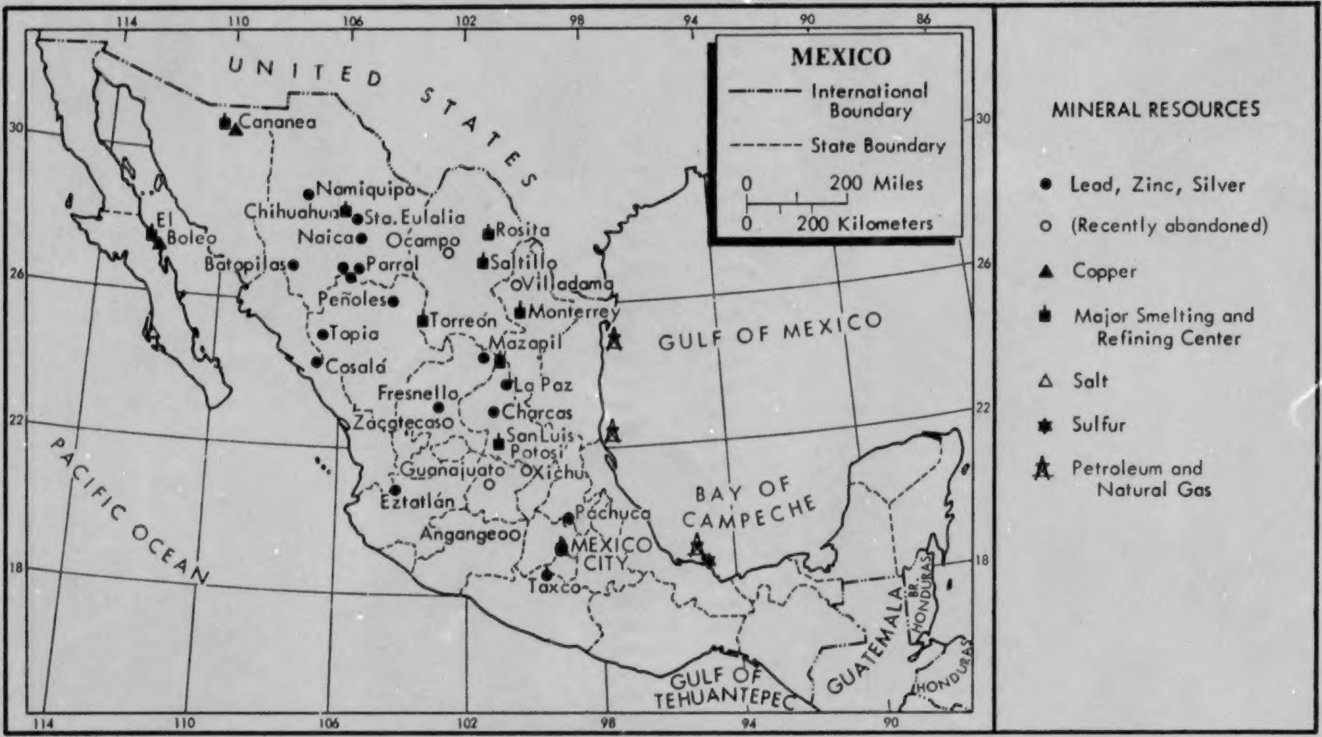

MEXICO
International Boundary
State Boundary
0 200 Miles
0 200 Kilometers
MINERAL RESOURCES
● Lead, Zinc, Silver
○ (Recently abandoned)
▲ Copper
Major Smelting and Refining Center
△ Salt
✱ Sulfur
Petroleum and Natural Gas
UNITED STATES
GULF OF MEXICO
BAY OF CAMPECHE
PACIFIC OCEAN
GULF OF TEHUANTEPEC
GUATEMALA
BR. HONDURAS
HONDURAS
Cananea
El Boleo
Batopilas
Namiquipa
Chihuahua
Sta. Eulalia
Naica
Ocampo
Parral
Peñoles
Topia
Cosalá
Torreón
Rosita
Saltillo
Villadama
Monterrey
Mazapil
La Paz
Fresnello
Charcas
Zacatecas
San Luis Potosí
Guanajuato
Xichu
Eztatlán
Angangeo
Pachuca
MEXICO CITY
Taxco
114
110
106
102
98
94
90
86
30
26
22
18

Figure 6. Mineral resources of Mexico.

Coahuila, Villadama in Nuevo León, the famous Zacatecas mines, and those of Guanajuato. In 1969, most of the silver production came from the exploitation of the complex sulfide ores of the Cordilleran system for lead and zinc, and production tended to fluctuate with the world price for these non-ferrous metals. A significant fraction of Mexico's silver was exported, principally via the tourist trade as jewelry or holloware (see ch. 20, Industry).

Of other metallic ores, Mexico is one of the world's leading producers of lead and zinc, and has been so since the late 19th century. These Mexican ores are of the same type which occur in the Cordilleran system from Alaska to the southern Andes. They occur as hydrothermal deposits associated with the Larmide, and more rarely, with the later Nevadan or Coast Range orogenies. Most of this set of deposits are to be found in the ranges of the Mesa del Norte or the Sierra Madre Occidental (see ch. 20, Industry).

Mexico is a significant, but not major producer of copper, principally from the Cananea deposits of northern Sonora, in operation since the 1880's, and geologically related to the adjacent deposits of Arizona and New Mexico. The other major producing area is at El Boleo, in Baja California Sur, also opened in the 1880's. The Taxco ores were originally mined by the Indians for tin, but tin production in Mexico has been nominal.

Mexico is generally deficient in known exploitable resources of iron and the ferro-alloy metals. Mexico does have minor production of manganese in Baja California and in the two Sierra Madres of the north of molybdenum in Sonora and of tungsten, also in Sonora. The only developed or, in fact, surely known area of economically exploitable iron ore is the Cerro de Mercado, near the city of Durango, which has thus far been sufficient to permit the growing Mexican steel industry to avoid dependence on foreign ores. It is quite possible, and in accordance with both the climate of the tropical parts of Mexico, that deposits of lateritic iron ore or bauxite (the ore of aluminum) may be found, but none were known to exist in 1969.

Mexico is fairly deficient in known coal resources. However, the deposits of bituminous coking coal in the Sabinas basin of northern Coahuila, first exploited in the 1880's, fueled Mexico's railroads in the late 19th and early 20th centuries and localized Mexico's earliest, and still premier, heavy industry concentration at Monterrey.

Petroleum and natural gas are far more important in contemporary Mexico than coal, and have been for at least 30 years. Nearly 80 percent of Mexico's energy for industry and transportation as well as a significant chemical industry comes from this resource. There are three areas of known reserves and significant production: the Reynosa gas fields of the Río Grande Delta in the north; the oil and gas fields of the Tampico area in southern Tamaulipas and northern Veracruz; and the Poza Rica field, which in recent years has been producing nearly 25 percent of Mexican oil. The oil and gas resources of southern Veracruz, now principally exploited for natural gas, may have reserves that are very large. Thus far there has been little exploitation of off-shore oil in these Mexican areas, but the similarity of the geology and the shallowness of the Gulf of Mexico would seem to promise future potential production, when needed.

Most other non-metallic minerals are of internal significance only. A notable exception is sulfur, produced as in Louisiana by the high temperature Frasch process from salt domes underlying the coastal plain and geologically associated with the petroleum and gas deposits. Another exception is salt, especially from the seawater evaporation works of the Baja Peninsula. As yet, the salt of the Tabascan salt domes is not being extensively exploited, but the growing petrochemical industry at the port of Minatitlán is expected to change this. Salt production elsewhere in Mexico is principally a matter of exploitation of the deposits in the basins of interior drainage and is mostly locally consumed in mining, heavy industry, or domestic use. Other non-metallic mineral production such as building stone, limestone for cement or agricultural use, or use of clays, is and historically has been a matter of local domestic consumption. A minor but perhaps noteworthy exception has been the use of semi-precious stones, volcanic glasses, and ceramic glazes for the production of jewelry for sale domestically, to tourists, or for export (see ch. 20, Industry).

MANMADE FEATURES

The pressures of man on the land, from pre-Conquest times to the present, have significantly altered the physical setting of the Mexican culture. In the arid north and in the uplands, grazing by cattle and sheep and especially, by goats and donkeys, have permanently altered the vegetation, and have led to significant destruction and removal of topsoil. Similarly, both in the tropical lowlands, and on the slopes in the tropical and sub-tropical hill lands, recurrent cropping of maize, has led to the depletion or actual removal of much of the original soil resource. In some areas, draw on subsurface water resources has passed the point of any early replenishment. Well-conceived conservation programs are beginning to mitigate many of the worst of these situations, but some of the losses are irreversible at present levels of technology. Urban occupancy of the land has been less destructive of the nation's productive resources, but in Mexico, as in other areas of the world, significant areas of premium agricultural land has been invaded by urban construction, especially in the vicinity of the capital.

Irrigation Works

Major irrigation developments can be found in nearly every province of the arid north, but Sinaloa, Sonora, Chihuahua, Coahuila, Nuevo León and Tamaulipas, all have experienced major new developments in the exploitation of available irrigation waters. Significant though smaller new developments have taken place in the Central Zone supplementing those inherited from Meso-American and Spanish times, and a new development is underway on the Río Tehuantepec, on the dry southern side of the isthmus.

Drainage and Flood Control Works

Drainage works, unlike irrigation, have been largely a matter of post-Independence times, and most post-date the Revolution. Among those of importance are the new drainage projects in the Coastal Lowlands of Tabasco, Campeche, and Veracruz provinces. Along with the flood control and hydroelectric project with which they are, or are to be, associated, these will produce a major change in the physical makeup of these renascent areas (see fig. 4).

Hydroelectric Works

The earliest hydroelectric developments in the Sierra Madre Oriental were built in the late 19th century, but the surge of construction of large hydroelectric installations was an accomplishment of the Revolution. The newer structures are frequently multi-purpose dams, serving flood control and irrigation needs as well as power generation. As yet, the output of these works and the several thermoelectric sites is only regionally netted.

The largest area of netted power extends from the Miguel Alemán complex southwest of the capital, through Mexico City to the Necaxa and Mazatepec works in the Sierra Madre Oriental, and thence south through the city of Veracruz to the Papaloapan system and on to the thermal plant at Minatitlán at the Isthmus of Tehuantepec. Smaller nets focus on: Guadalajara and the Cupatizio project; the Sonora and northern Sinaloa coasts and the Novillo project; Chihuahua and the Conchos Valley; and the Falcon Dam on the Río Grande and Monterrey. Major new works are underway in the lower Balsa Valley and in the Grijalva Valley of Chiapas.

Ports

Although fishing ports or small boat harbors along Mexico's extensive seacoasts are numerous, only a few are of major international significance. None is a good "natural harbor," and Veracruz—the most important—is almost entirely a "made" port. The other ports of more than local significance on the Atlantic coast are Matamoros, Tampico, Tuxpan, Coatzalcoalcos, Campeche, and Progreso. The Mexican port of the Río Grande (Río Bravo) Delta is connected by rail to Monterrey. Tampico, at the mouth of the Panuco, is in the center of the old oil and gas area. It is connected by rail with Monterrey and the Mesa del Norte and by highway to the Central Zone. Tuxpan is the port for the Poza Rica area. Coatzalcoalcos is the (Puerto Mexico) outport for Minatitlán and the Isthmus of Tehuantepec. Campeche is the port and capital of the province of the same name. Progreso is the port for Merida in Yucatán.

There are no ports of real significance on the peninsula of Baja California, but La Paz, capital of Baja California, Sur, is gaining popularity as a sportsfishing and yachting center. Manzanillo, terminus of the railroad from Guadalajara, is perhaps the most important of the contemporary west coast ports on the mainland.

Other ports of the Gulf of California or Pacific coasts include: Venustiano Carranza, salt port of the Bahia Vizcaino in Baja California; Santa Rosalía, copper port of the Gulf of California in Baja California; Guaymas, shrimping center, and port for the cotton growing Hermosillo and Nogales areas of Sonora; Yavaros, port for the Navojoa area; Topolobampo, terminus of the newly completed railroad from Ciudad Chihuahua; Altata, port for Culiacan; Mazatlan, port of southern Sinaloa, and terminus of the highway from Durango; San Blas, port for Nayarit, and former Pacific outlet for Guadalajara; Puerto Vallarta, a fashionable resort; Acapulco de Juárez, a cruise and yachting port and major tourist center; Puerto Angel, port for Oaxaca de Juárez; Salina Cruz, Pacific terminus of the Tehuantepec rail and highway route and the petroleum pipeline from Minatitlán; and Puerto Madero, last Mexican port before the Guatemalan border.

Pipelines

The Mexican petroleum deposits have given rise to a growing system of pipelines (see fig. 7). In the north a short pipeline connects the gas fields of the Sabinas area of Coahuila with Nuevo Laredo, but the more important line is the system which connects the Reynosa gas fields of Tamaulipas with Monterrey, Monclova, and Torreón. From Torreón the system is being extended north to Ciudad Chihuahua and on to Ciudad Juárez. A petroleum products pipeline connects Tampico with the Monterrey heavy industry center. Also from the Tampico area, an oil pipeline system connects Tampico and Poza Rica and continues into the Central Zone, with twin terminals at Mexico City and Salamanca in the Bajío. A natural gas system connects Poza Rica with Mexico City, with a western extension to Salamanca. Mexico City is also connected with the new southern fields at Minatitlán and Ciudad

Pemex. An oil pipeline connects Ciudad Pemex with Minatitlán as well. A products pipeline crosses the isthmus from Minatitlán to the export port of Salina Cruz on the Pacific.

Railroads

Mexico's rail net is nation-wide (see fig. 8). It connects with the United States at Mexicali in Baja California, Nogales in Sonora, Ciudad Juárez in Chihuahua, Ojinaga, in the Big Ben Country of Chihuahua, Piedras Negras in Coahuila, Nuevo Laredo in Tamaulipas, and Matamoros at the mouth of the Río Grande, also in Tamaulipas. On the south, only the line along the Pacific coastal plain, continues into Guatemala. With the exception of a few remnant local lines, the system has been nationalized and is operated by an agency of the Mexican Government.

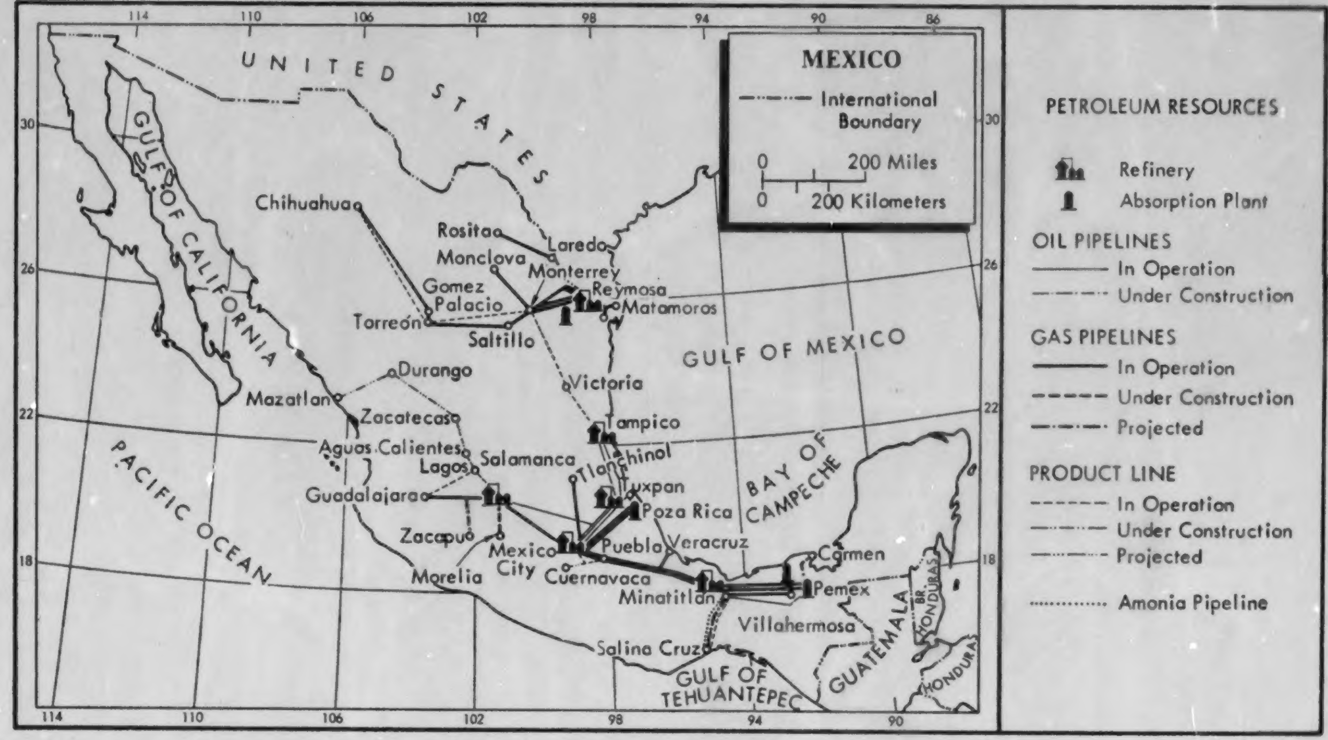
Highways

Mexico has a growing national system of paved or surfaced highways which has grown from only 1,500 miles in 1936 to over 18,000 miles in 1968. An extensive government project has constructed a network of improved farm-to-market rural roads (see fig. 9). As with the rail net, there are better through highway connections from the north. There are four major border crossings with the United States. These are at Nogales in Sonora, Ciudad Juárez in Chihuahua, Nuevo Laredo in Tamaulipas, and at Matamoros in the Río Grande delta. The only important crossing in the south is the Interamerican Highway crossing from Chiapas into Guatemala. The main west coast highway runs south through Sonora from Nogales to Guaymas, then follows the coast through Mazatlán to Tepic in Nayarit. Here, like the railroad, it turns inland to Guadalajara and on to Mexico City.

The main route of the Mesa del Norte runs from Ciudad Juárez to Ciudad Chihuahua, and from there on south through Torreón, Durango, and Zacatecas, to Irapuato in Guanajuato, where it meets the San Luis Potosí road. From Nuevo Laredo, a highway route leads south to Monterrey and thence via Saltillo, and San Luis Potosí, to the Central Zone. From Monterrey an alternate route swings southeast to Ciudad Victoria where it meets the road from Matamoros, and thence to Pachuca and the central zone. South of Mexico City, a main highway crosses the Sierra Madre del Sur to Acapulco, and the Interamerican Highway goes south via Puebla, Oaxaca, and central Chiapas to Guatemala.

Airways

Mexico has excellent commercial air services, both internationally and internally (see fig. 10). The international traffic focuses on the capital, but there is a nation-wide network of scheduled air service,


MEXICO
International Boundary
0 200 Miles
0 200 Kilometers
UNITED STATES
GULF OF CALIFORNIA
PACIFIC OCEAN
GULF OF MEXICO
BAY OF CAMPECHE
GULF OF TEHUANTEPEC
GUATEMALA
BR. HONDURAS
HONDURAS
Chihuahua
Rosita
Laredo
Monclova
Monterrey
Reymosa
Matamoros
Gomez Palacio
Torreon
Saltillo
Durango
Victoria
Mazatlan
Zacatecas
Tampico
Aguas Calientes
Salamanca
Lagos
Tlanchinol
Tuxpan
Poza Rica
Guadalajara
Zacapu
Mexico City
Puebla
Veracruz
Morelia
Cuernavaca
Minatitlan
Carmen
Pemex
Villahermosa
Salina Cruz
114
110
106
102
98
94
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86
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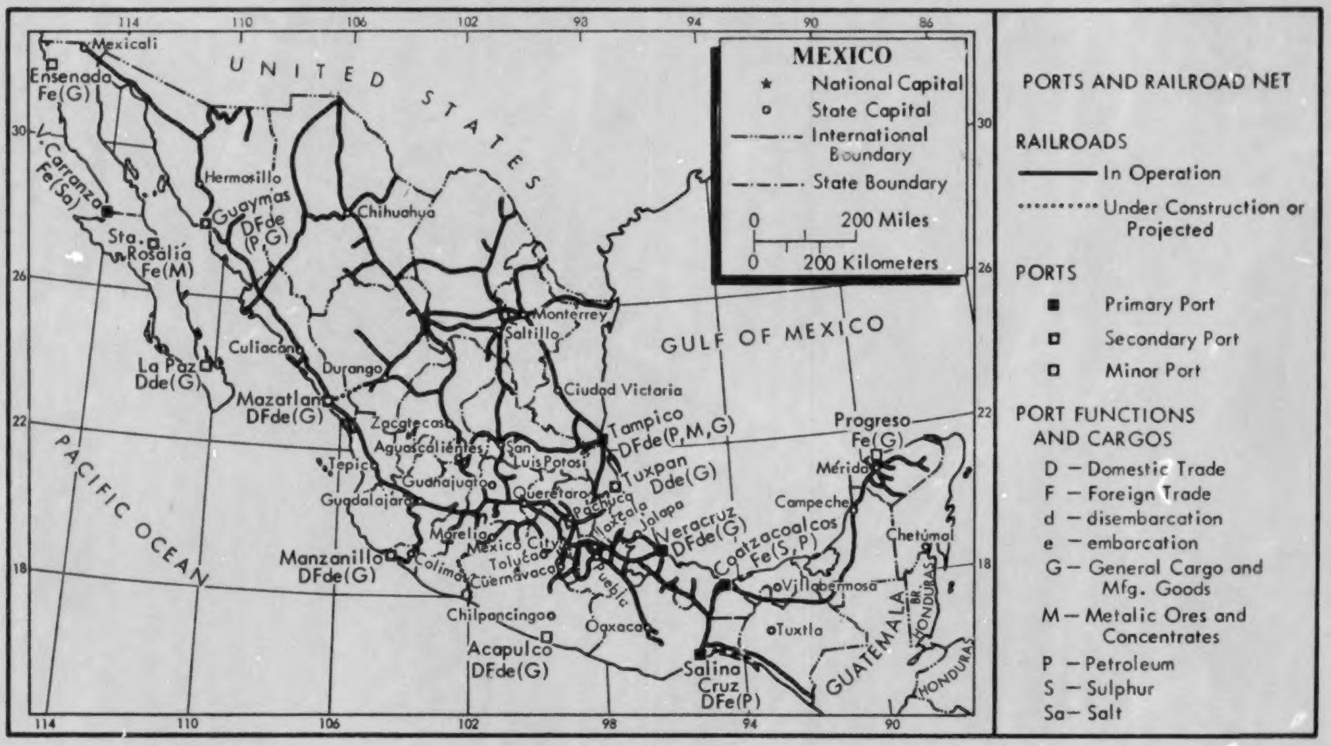
26
22
18
PETROLEUM RESOURCES
Refinery
Absorption Plant
OIL PIPELINES
In Operation
Under Construction
GAS PIPELINES
In Operation
Under Construction
Projected
PRODUCT LINE
In Operation
Under Construction
Projected
Amonia Pipeline

Figure 7. Petroleum resources of Mexico.


MEXICO
★ National Capital
○ State Capital
International Boundary
State Boundary
0 200 Miles
0 200 Kilometers
PORTS AND RAILROAD NET
RAILROADS
In Operation
Under Construction or Projected
PORTS
■ Primary Port
▣ Secondary Port
□ Minor Port
PORT FUNCTIONS AND CARGOS
D — Domestic Trade
F — Foreign Trade
d — disembarcation
e — embarcation
G — General Cargo and Mfg. Goods
M — Metalic Ores and Concentrates
P — Petroleum
S — Sulphur
Sa — Salt
UNITED STATES
GULF OF MEXICO
PACIFIC OCEAN
GUATEMALA
BR. HONDURAS
HONDURAS
Mexicali
Ensenada Fe(G)
V. Carranza Fe(Sa)
Hermosillo
Guaymas DFde (P,G)
Sta. Rosalía Fe(M)
La Paz Dde(G)
Culiacan
Chihuahua
Durango
Mazatlan DFde(G)
Monterrey
Saltillo
Ciudad Victoria
Tampico DFde(P,M,G)
Zacatecas
Aguascalientes
San Luis Potosi
Tepic
Guanajuato
Guadalajara
Queretaro
Pachuca
Tuxpan Dde(G)
Tlaxcala
Jalapa
Veracruz DFde(G)
Morelia
Mexico City
Toluca
Cuernavaca
Puebla
Colima
Manzanillo DFde(G)
Chilpancingo
Acapulco DFde(G)
Oaxaca
Coatzacoalcos Fe(S,P)
Villahermosa
Tuxtla
Salina Cruz DFe(P)
Campeche
Mérida
Progreso Fe(G)
Chetumal
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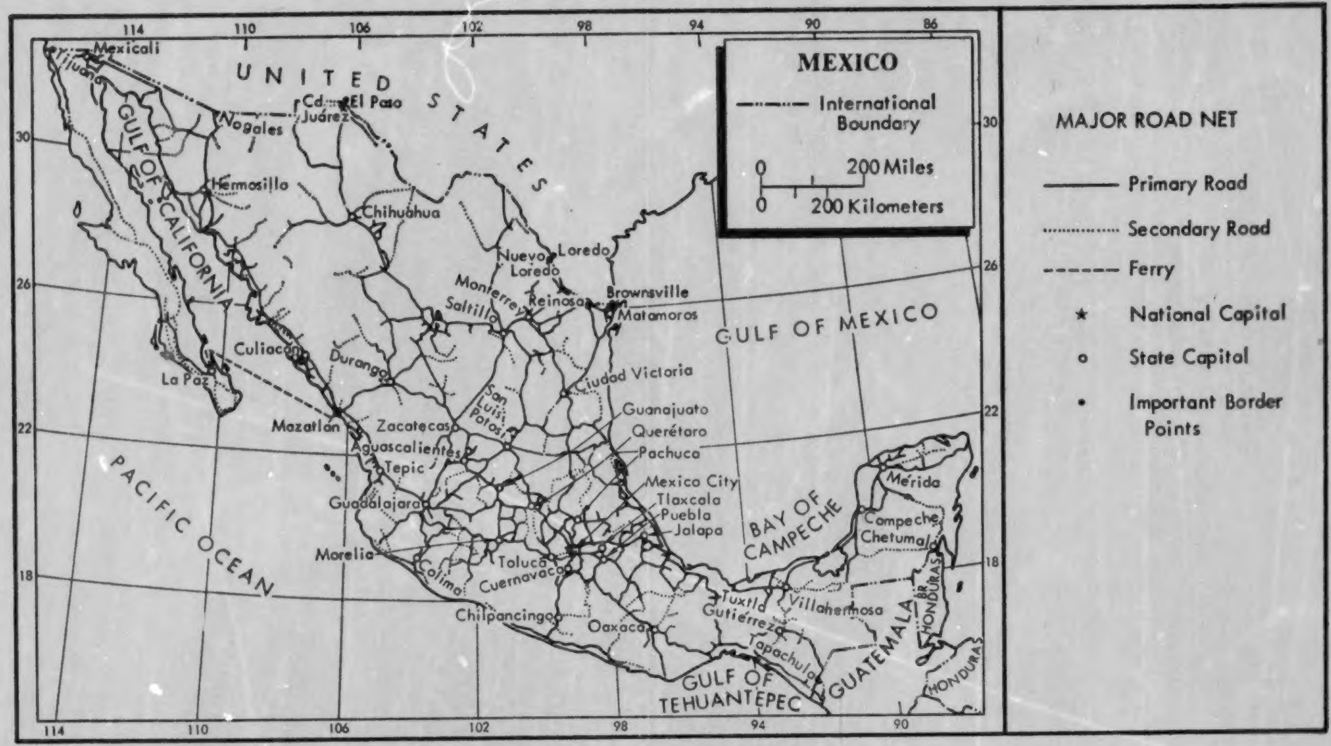
22
18

Figure 8. Railroad net of Mexico.


MEXICO
International Boundary
0 200 Miles
0 200 Kilometers
MAJOR ROAD NET
Primary Road
Secondary Road
Ferry
★ National Capital
○ State Capital
● Important Border Points
UNITED STATES
GULF OF MEXICO
GULF OF CALIFORNIA
PACIFIC OCEAN
BAY OF CAMPECHE
GULF OF TEHUANTEPEC
GUATEMALA
BR. HONDURAS
HONDURAS
Mexicali
Tijuana
Nogales
Cd. Juárez
El Paso
Hermosillo
Chihuahua
Nuevo Loredo
Loredo
Monterrey
Saltillo
Reinosa
Brownsville
Matamoros
Culiacán
La Paz
Durango
Mazatlán
Zacatecas
San Luis Potosí
Ciudad Victoria
Guanajuato
Querétaro
Pachuca
Mexico City
Tlaxcala
Puebla
Jalapa
Aguascalientes
Tepic
Guadalajara
Morelia
Colima
Toluca
Cuernavaca
Chilpancingo
Oaxaca
Tuxtla Gutiérrez
Villahermosa
Tapachula
Mérida
Campeche
Chetumal
114
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102
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86
30
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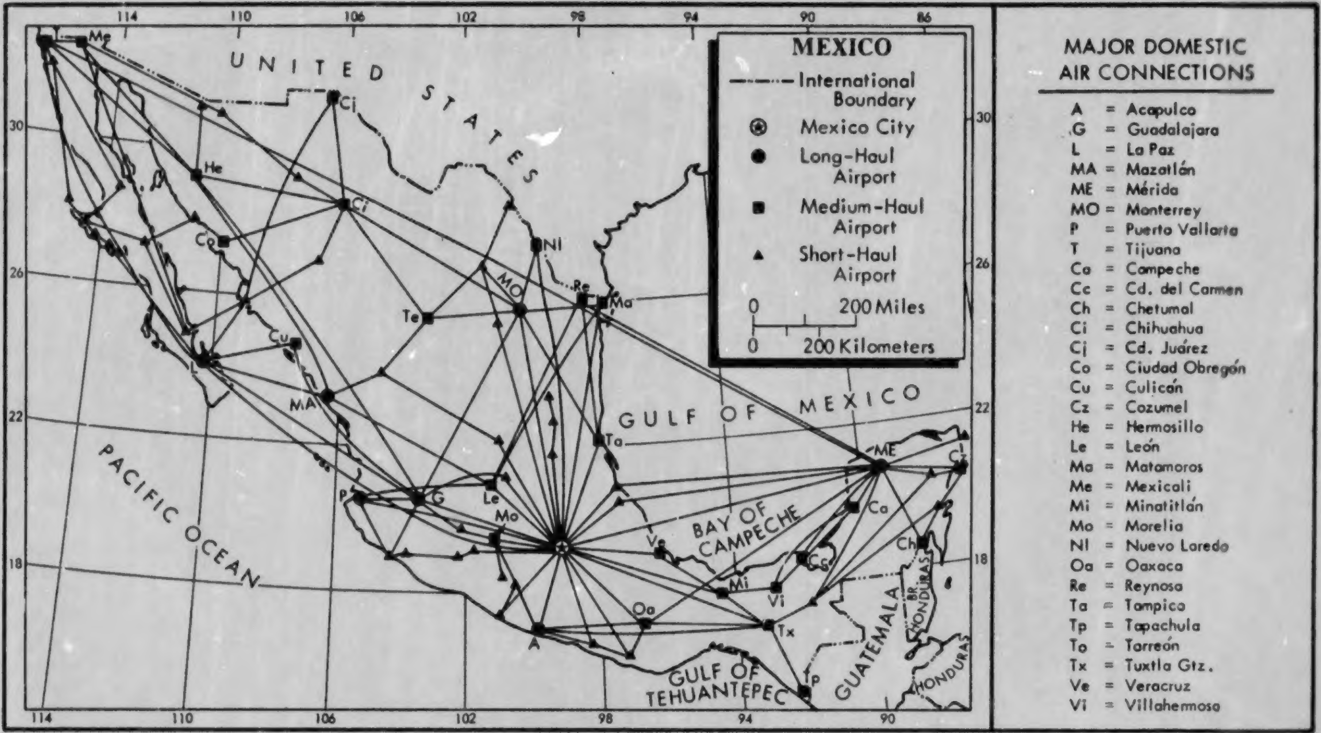
22
18

Figure 9. Highway network of Mexico.


MEXICO
International Boundary
Mexico City
Long-Haul Airport
Medium-Haul Airport
Short-Haul Airport
0 200 Miles
0 200 Kilometers
UNITED STATES
GULF OF MEXICO
BAY OF CAMPECHE
PACIFIC OCEAN
GULF OF TEHUANTEPEC
GUATEMALA
BR. HONDURAS
HONDURAS
114
110
106
102
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Ma
Ta
P
G
Le
Mo
A
Oa
Ve
Mi
Vi
Tx
Tp
Cc
Ca
ME
Ch
Cz
MAJOR DOMESTIC AIR CONNECTIONS
A = Acapulco
G = Guadalajara
L = La Paz
MA = Mazatlán
ME = Mérida
MO = Monterrey
P = Puerto Vallarta
T = Tijuana
Ca = Campeche
Cc = Cd. del Carmen
Ch = Chetumal
Ci = Chihuahua
Cj = Cd. Juárez
Co = Ciudad Obregón
Cu = Culicán
Cz = Cozumel
He = Hermosillo
Le = León
Ma = Matamoros
Me = Mexicali
Mi = Minatitlán
Mo = Morelia
Nl = Nuevo Laredo
Oa = Oaxaca
Re = Reynosa
Ta = Tampico
Tp = Tapachula
To = Torreón
Tx = Tuxtla Gtz.
Ve = Veracruz
Vi = Villahermosa

Figure 10. Domestic air service routes in Mexico.

some of which provides more local international services. Unlike many other nations Mexico does not have a "chosen instrument," a nationally subsidized flag carrier for international service. The nearest thing to such an instrument is Aeronaves de Mexico, a consolidation of a number of pre-existing lines.

The principal rival of Aeronaves is Mexicana, a company jointly owned by Pan American World Airways and a Mexican investment group. Other Mexican airlines are local service in character only, and several are essentially non-scheduled supplementary carriers. Mexico City is served by a large number of the major international carriers—North American, Latin American, European, and even Asian. Except for Castro's Cubana, however, there are no services from the Communist Bloc of nations. In addition to the scheduled air carriers, there are a number of services (charter, air taxi and the like) in the general aviation category, providing service into more remote areas (e.g. the Petén, the Sierra Madre Occidental, and Baja California).

SETTLEMENT PATTERNS

The settlement patterns of Mexico are varied and changing. Many have persisted since pre-Conquest times, some were introduced by the Spanish, but even more are an evolving amalgamation of historic and modern influences.

There has been a fundamental differentiation throughout Mexican history between the settlement patterns in the center and south, the area of the pre-Conquest high Meso-American cultures, and the north, the area of the primitive Chichimec. Beyond this, and also from earliest days, there has been a difference of the settlement patterns of the coastal dwellers and the inhabitants of the interior.

Early Settlements

It was apparently in central Mexico's Highlands that the climatic changes following the last advance of the North American continental ice sheet induced the profound cultural modification of the Indian hunting, fishing, and gathering pattern into the sedentary agricultural Meso-American high cultures. Notably, three of the five basics of Indian agriculture seem to have been first domesticated in the highlands, and that advanced Meso-American culture spread from the Valley of Mexico and the separate, but probably related, core area of the Guatemalan Highlands.

At the time of the Spanish Conquest the Meso-American High Cultures coexisted with their still primitive Desert Culture nomadic cousins to the north, and influenced the central highlands of Honduras and the lake country of the Nicaraguan Great Depression. The Aztec Empire, expanding its influence outward from the coreland of Mexico, had established hegemony over most of this area (see ch. 3, Historical Setting).

The Spanish Conquest and colonization of New Spain followed the easy point-to-point route from Havana to the Yucatán Peninsula and thence along the coast to Veracruz, gateway to the Valley of Mexico, center of Aztec power. After assuring control of the passes of the mountains later known as the Sierra Madre Occidental, Cortés's campaigns broke into the southern part of the central mesa and its coreland the Valley of Mexico. After the defeat of the Aztecs over the next two decades, the conquerors radiated outward over all of the areas of high Meso-American cultures.

In the first days of the Conquest the institution of large feudal estates, initiated by Cortés himself, dominated the settlement pattern. In the Central Zone, and in the Balsas Depression to the south, the principal lure was gold, silver, or docile and productive populations. During this early period, the Spanish Crown proclaimed the whole of Middle America north of Panama as the Viceroyalty of New Spain. In 1543, the difficulties of administering all of this territory from Mexico City, given the rugged terrain and the limitations of the transportation and communications technology of the time, led to the formation of the semi-autonomous Captaincy General of Guatemala to administer the Central American area and forced the Spanish Crown to administer Mexico independently of Central America.

After breacing the Chichimec frontier the Spaniards discovered the great silver deposits of Zacatecas in 1646. This discovery and the resulting wave of Spanish colonization caused the formation of the province of New Galicia, with a capital at Guadalajara. The province included the greater part of the present states of Jalisco, Nayarit, and Zacatecas.

The first settlment of the frontier was a matter of alternate pulses of prospectors and farmers, the latter drawn from the free Aztec, Tarascán, and Otomi Meso-American Indians. By the 1570's this first belt of settlement had spread northward into what has become Durango and southern Chihuahua, as well as Aguascalientes (hot waters—from the hot springs of this still geologically active area), Guanajato, and Queretaro. From Zacatecas the first of the great colonization routes into the north followed the eastern foothills of the Sierra Madre Occidental northward through the basin and range country of the northern Mexican Plateau. It continued via El Paso del Norte (the pass of the North), where the Río Grande went between the southern spurs of the Rocky Mountains of the present United States and the northern ends of the twin Sierra Madre Ranges of northern Mexico. It then continued on into the upper Río Grande Valley of today's southern Colorado and New Mexico.

The second of the great northward routes went along the Sierra Madre Oriental to Saltillo, Monterrey, Monclova, and eventually to San Antonio (de Bexar), in present-day Texas. The third route of exploration and subsequent northern colonization, was used mainly by Jesuit missionaries. This route took off from the slaving center of Culiacán along the western foothills of the Sierra Madre Occidental, and the shores of the Sea of Cortés and thence inland, leading eventually to the mission settlement of Tucson in southern Arizona. A fourth axis was finally opened by the defeat of the remnant Guachichils in 1592. This opened the route from the Bajío of Guanajato to the silver mines of San Luis Potosí and Matehuda and an alternate route to Saltillo.

In the late 17th and 18th centuries three additional routes were opened. The first was opened by the Jesuits after a landing at Loreto in Baja California in 1697, and spreading both to the north and south along the peninsula. In the mid-18th century the government encouraged the settlement of the coastal plain in the present province of Tamaulipas. This line of settlement reached the lower Río Grande at Reynosa, crossed the river upstream at Laredo, and led to the founding of the missions around Goliad, Texas. The last of these late thrusts was the late 18th-century settlement of Alta California.

One important consideration in the colonial period in Mexico was the differential impact of the coming of the Europeans on the highland and lowland populations of the high Meso-American cultures of Central and Southern Mexico. When the Spanish arrived there were dense and relatively advanced and prosperous populations of Aztec clients in present day Veracruz, in Tabasco, and in the Yucatán peninsula (now the provinces of Campeche and Yucatán, and the Territory of Quintana Roo). With the Spaniards came malaria and yellow fever—along with the smallpox, measles and the like which also devastated the highlands—and the populations of the tropical lowlands were nearly wiped out. Only in very recent times, with the advent of efficient insecticides and improved drugs, has large-scale settlement of these areas recommenced. In the highlands, although introduced disease as well as short sighted policies of exploitation by the early colonists resulted in a severe reduction in the population, it was by no means as catastrophic, and the continuity of occupancy was never really broken.

In the south, the extension of the Sierra Madre Occidental called the Sierra Madre del Sur, in the present state of Guerrero, served and still serves as a barrier to settlement. The present resort town of Acapulco de Juáraz, connected to Mexico City only by a difficult set of passes, became the principal Pacific port, as Veracruz had become the principal port of the east coast. Throughout the colonial period, and even more after the Independence, the dry north became more and more dominated by the expansive traditions of the *mestizo* cattlemen and miners. The tropical south remained Indian, under a veneer of Europeanism. The populous temperate uplands of the Central Zone, the Mexican coreland, developed a stratified society of Indian farmers, a *mestizo* proletariat, and a Spanish aristocracy. The latter divided into the Spanish-born and Mexican-born under the Spanish, but they blended into one group after the Independence.

During the 18th century Mexico was the bastion from which Spanish imperial activities on the mainland of North America were mounted. After Independence, however, the northern portions, inherited from the Spanish Imperium, lay athwart the westward advance of the expanding United States. Mexico proved unable to maintain its suzerainity over these areas, but their loss has been a historical source of antagonism between the two neighboring states (see ch. 3, Historical Setting).

Similarly, after Independence, Mexico did not have sufficient developed power to retain the centers of the old Captaincy-General of Guatemala (except for the northern fringe of that territory in Chiapas). Isolated by mountains and jungle from Central Mexico, the Central American states broke away after the collapse of the brief empire of Agustín Iturbide (see ch. 3, Historical Setting).

During the over one hundred years of recurrent civil conflict after Independence, the prize for which the various factions contended was the Central Zone. However, the forces which brought about the Revolution were not predominantly drawn from the core, but were instead a coalition of representatives of the southern Indian tradition and the frontier Nortenos (see ch. 3, Historical Setting).

With the central mesa (the southern portion of the Mexican Plateau), the several important volcanic basins were separated from one another by semi-desert and by mountains and hills. Because of this, even in Aztec times, the cultures based on the Valley of Mexico and its system of five lakes had not been able to establish hegemony over the north-western portion of the area. Instead from their original coreland around Lake Patzcuaro local tribes long ago had created another center, foreshadowing the rivalry between Guadalajara and Mexico City—Jalisco and Michoacán versus the states of the Valley of Mexico in the colonial and 19th-century post-independence periods. Similarly, the highlands of Guerrero and Oaxaca, south of the rugged and arid Balsas Depression, and the even more remote areas of Chiapas, and Campeche, Yucatán, and Quintana Roo, on the Yucatán Peninsula, were remote and isolated from the sources of national power and have only been brought fully into the national society within the 20th century. Throughout Mexico, in the Central Zone, as well as the more generally isolated north and south, the rugged terrain and the separation of habitable centers of population by large expanses of wet or dry wilderness has tended to foster the survival of pockets of aboriginal culture, generate new localisms and parochialisms, and interfere with the development of a larger national consciousness.

Present-Day Rural Patterns

Rural patterns have been most persistent but, particularly in the north, are among those undergoing the most rapid changes. In contemporary Mexico these patterns generalize somewhat as follows. There are a few areas along the coast where primitive villages of Indian fishermen and gatherers still cling to the coasts (e.g. the Seri of Tiburon Island in the Gulf of California). There are also areas, both in the mountains of the northwest, and in the highlands of Chiapas, where Indian hunters and gatherers supplement hunting and gathering with slash-and-burn shifting cultivation. These, however, are only rare remnants of the past. More common in the south are the areas of communal shifting cultivation on the Yucatán Peninsula, in Chiapas, and in Oaxaca and along the coast in Tabasco and Veracruz. Here the village sites are relatively permanent and the pattern of cultivated fields and jungle fallow rotates through a fairly long cycle.

Interspersed with this are the former large plantations, growing coffee, sugarcane, henequen and, sometimes, pineapples, tobacco, cocao, vanilla beans, bananas or mangos. These, for the most part, have been converted to communal operations. The old pattern of the north, with local areas of village-centered irrigation agriculture serving the mines and almost non-agricultural mining settlements, interspersed with extensive cattle ranches, has given way to a pattern of large-scale irrigation agriculture in wheat, cotton, and winter vegetables, much of it a matter of individual entrepreneurial holdings, commercial or cooperative cotton gins, feed lots for finishing range beef, and cooperative or commercial vegetable packing and loading facilities. Only the cattle ranches are still typically a matter of large landowners. The agriculutral areas tend to be individual farms of small or middle size or in communal operations. This agricultural revolution has resulted in booming growth for the market towns which serve the irrigation areas (e.g. Torreón, Ciudad Obregón, Culiacán, etc.).

In the Mesa Central and in the adjacent areas of highland, more of the rural occupancy remains in smaller subsistence agriculture, although commercial raising of maize, beans, maguey, and some sugar and wheat is found. The property pattern is a mixture of communes, small holdings, and residual estates, but the settlement pattern is almost entirely agglomerated in villages, as in the pre-Conquest Indian and Hispanic village patterns. Isolated farmsteads are found in Mexico, especially in the north, but the farming village is by far the more normal pattern.

Urban Settlement

Pre-Conquest Mexico had many cities and towns. By the end of the Spanish colonial period, however, there was only one city left, Mexico City itself. Even the number of towns had been sharply reduced and most Mexicans lived in villages. In the 20th century this pattern has changed dramatically. Mexico City, the national capital and principal city of Mexico, is growing rapidly, along with its suburbs. Many new or revived towns and cities are growing up all over Mexico. Among them are Ciudad Obregón; Ciudad Juárez, now larger than its twin, El Paso, Texas; Monterrey; Torreón; Tampico; Veracruz; Puebla; Guadalajara; Minatitlán; and Ciudad Pemex. Even the smaller towns are not only growing rapidly but are becoming more urban in character, with permanent stores and service functions rather than periodic markets, and with growing middle-class residential areas along with the burgeoning poor districts.

This increasingly urban society is being knit together with a growing network of transportation and communications. In a belt extending from Manzanillo on the Pacific to Veracruz on the Gulf, the concentration of population, industrial production, agriculture, transport and communications, constitutes the primary core area of the nation. The focus of all of this is the Mexican national core area in the Central Zone, and its center, Mexico City, the National capital and metropolis. Mexico City is not only the principal city of its country, but one of the great cities of the Americas, and especially of Latin America. Mexico City attracts students and tourists from the entire Latin American world. The focus in the Valley of Mexico has held primacy in the country since Aztec times, but the contemporary Central Zone has extended its influence to sweep in the traditional rivals of Puebla and Guadalajara and has made good the connection to its traditional port of Veracruz. This area is the fountainhead of Mexican national power and the core of the nation. Only in the belt from Matamoros to Torreón, centered on the heavy industrial center of Monterrey, is there an area which in any way rivals the primary core in significance within the nation, and this secondary core area is a very long way second in current or apparent potential significance.

CHAPTER 3

HISTORICAL SETTING

Mexico's Indian cultures reached heights unsurpassed in the pre-Columbian Americas. The very name—New Spain—indicates the position of Mexico in the Hispanic colonial empire. New Spain was the richest, most advanced, most pampered, and most watched-over of all of Spain's colonies in the New World. With independence, however, Mexico's location and image of wealth came to be a disadvantage. Foreign powers vied over its territory and riches, and in the process instilled in the Mexican an intense xenophobia, a major undercurrent in modern Mexican culture.

In the fourth century A.D., the civilizations located in the Valley of Mexico (Anáhuac) already dominated the Mesoamerican cultural complex. The preeminence of this area has never been lost, in spite of the early growth of a rival region centered in Guadalajara and the newer industrial area around Monterrey (see ch. 2, Physical Environment).

Regional differentiation and rivalries have long been enhanced by the fundamental cultural difference between the low (Chichimec) Indian cultures of northern Mexico and the high Indian cultures of central and southern Mexico. Because of this and consequent events during the colonial period, European customs and values are dominant in the settled areas of the north, while Indian customs and values are more prominent throughout much of the center and south.

This national division is illustrated by two of the heroes of the Revolution, Pancho Villa and Emiliano Zapata. Villa, from Chihuahua, epitomized the brash *mestizo* (of Indian and Spanish descent) cowboy of the north, who felt impelled to display his *machismo* (manliness). In contrast, Zapata, an Indian from Morelos, was humble and parochial, fighting for the people of his little fatherland. This cultural dualism in Mexico has played a major role in the country's evolution (see ch. 12, Social Values).

Mexicans are aware of their debt to a number of high cultures—the Olmec, Teotihuacán, and Toltec civilizations, but especially the Aztec and Maya. The Indian community has tended to look inward and maintain its traditional values. After early colonial assimilation of European traits and cultural intermixing came a period of development of a distinctive cultural pluralism. Since 1920, the cultural *mestizaje* (crossing of the races) has been resumed, but Indian traits still persist in pro-fusion—epitomized by the Mexican agrarian reform technique centered on the *ejido*, the traditional Indian communal farmland (see ch. 5, Ethnic Groups and Languages; ch. 10, Artistic and Intellectual Expression).

The Hipanic tradition weighs heavily in modern Mexican social custom and thought, architectual and literary styles and tastes, and the political and economic system. It is only recently that Mexico has begun to emerge from economic dependenece on the Hispanic triad of agriculture, ranching, and mining. The Spanish traditions of status derived from landholdings and gentlemanly abstention from manual work, of the overblown impulse to seek government employment, and of regard for strong individualism have all continued to color social values. Against the Spanish tradition of a politically and economically strong Catholic Church, the revolutionary war of *la Reforma* was fought; the downfall of the Spanish institution of the *hacienda* (large estate) was the goal for which the Indian and the *mestizo* fought the Great Revolution.

The *mestizos* changed the racial composition of Mexico during the 19th century. As time went on, the *mestizos* grew in numbers and power, especially in the north (see ch. 4, Population; ch. 5, Ethnic Groups and Languages). They became the backbone of the indigenous liberal movements, advocating the elimination of race and inherited social position as sources of status. Mexicans have come to associate the process of racial mixture with the formation of their national community (see ch. 12, Social Values; ch. 17, Political Values and Attitudes).

The destruction in the Revolution led at first to a leveling of the social structure but later to a sense of a need for harmony in building a new and cohesive national community. Mexicans of previously marginal status came into the national community from active participation in revolutionary struggles.

Out of the 20th-century Mexican Revolution rose a series of heroes—Madero, Zapata, Villa, Carranza, and Obregón (see ch. 17, Political Values and Attitudes). This pantheon provides historical continuity amidst social change for the national community. Through victories against reactionary and imperialistic forces, the revolutionary heroes washed away the sense of shame that Mexicans had felt about their past and brought a new-found pride in nationhood.

PRE-CONQUEST INDIAN CULTURES: THE NATIVE ROOTS OF MEXICAN CULTURE

Man came to the Americas in the late Ice Age. These initial immigrants who crossed the Bering land bridge were neither Mongoloid in the modern sense, nor were they of a single type (see ch. 5, Ethnic Groups and Languages). The first to arrive were long-headed and are found furthest south in the hemisphere, although populations of such peoples remain along the western coasts of Mexico. The second group were broad-headed peoples, especially typical of the lowland Mesoamerican Indians such as the Maya.

The end of the Ice Age marked the beginning of the Desert Culture, a method of existence that survived in northern Mexico and southwestern United States until the time of the conquest and beyond. The Desert Cultures domesticated the basic staples of the Indian and contemporary rural Mexican diet—the bottle gourd, then the pumpkin, beans, and chili peppers. Maize, the basis of settled life in Mexico, was domesticated, apparently first in highland Mexico around 5000 B.C. With this, Mexican man began a village-farming life, characterized by a sharp increase in population and the beginnings of an intellectual and cultural development. During the ensuing Formative Era, Preclassic culture, with maize and pottery, spread out of Mesoamerica to the Andean area.

The Olmecs

The "mother culture" of the advanced Mesoamericans was that of the archaeological Olmecs or "rubber people" of the Gulf Coast jungle country of eastern Veracruz and western Tabasco. To distinguish them from the historic Olmecs of a much later date, these Olmecs are often called the "Tenocelome" or "those of the jaguar mouth" in reference to their distinctive and powerful style of sculpture. At the centers of the civilization, La Venta and Tres Zapotes, are the earliest remains in Mesoamerica of a carefully laid out system of ceremonial mounds and temple-pyramids. Also found there are the oldest known Indian heiroglyphic writings. Stela C, one of the oldest astronomically dated monuments in the New World (est. 31 B.C.), is at Tres Zapotes.

There was a rapid increase in general population during the Olmec era, indicated by the rise of temple cities—architectural clusters of religious monuments where the rulers and priestly hierarchies lived with their retainers. These centers were surrounded by a scattering of villages and hamlets throughout the countryside where the mass of the people lived. Well-developed systems of trade linking centers at great distances, as well as markets, in which all types of food and manufactures were exchanged at regularly timed intervals, are apparent in the archaeological record of the late Preclassic period. Perhaps the most outstanding characteristic of these centers, however, is the fact that most Preclassic and Classic settlements were located in open ground, with obvious disregard for defense.

Classic Cultures

Teotihuacán

The Classic Era (A.D. 300 to about A.D. 900) brought these cultural elements to their height. The dominant power of the early Classic period was Teotihuacán, "the city of the gods," the first of the great Indian civilizations to unite most of Mesoamerica and to rule from the Valley of Mexico. There are strong continuities between its culture and those of the Toltecs and the Aztecs. Most other states between the desert frontier to the north and the Petén to the south seemed to have been partly or entirely dependent upon the civilization of Teotihuacán for their achievements during the early Classic period.

The hallmark of Teotihuacán was the monumental character of its urban plan, centered on the huge Pyramid of the Sun and bounded on the north by the Pyramid of the Moon. The central zone was made up of religious and civil buildings and residential palaces. The side streets led to surrounding urban neighborhoods of dense population—great expanses of almost continuous clusters of rooms separated by narrow, winding alleyways. Underlying this inner city was a vast underground drainage system and organizing it were what appears to be a series of neighborhood temples and open market areas.

At its peak Teotihuacán covered an area of 10 to 11 square miles with a total population of at least 50,000 and perhaps even of 125,000. The cities of the Valley of Mexico of that period were no longer religious centers or intermittent markets but well-planned urban centers with dense populations, bureaucracies, year-round markets, and distinct social classes which inhabited special districts and even special types of dwellings. The rural farming population lived in innumerable villages and towns surrounding the city.

Around A.D. 600, Teotihuacán was destroyed by invaders from semideserts of the north and northwest. The next 300 years in the Valley of Mexico were a period of barbarian invasion and disorder. When Teotihuacán fell, the unifying force in Mesoamerica was gone and a period of increasing factionalism ensued; each culture moved along its own lines effectively cut off from others. These other Classic cultures finally fell some 300 years later than did Teotihuacán, after a constant series of attacks from the north.

The Maya

In the crescent at the base of the Yucatán Peninsula, the great Classic period ceremonial centers of the Maya lowland, such as Tikal and Palenque, exhibited elements of civilization that are rare or lacking in Teotihuacán—writing, calendrics, and astronomy. They also achieved great heights in architecture and sculpture (see ch. 10, Artistic and Intellectual Expression). However, little if anything in the Maya Classic culture suggests the kind of state power and expansive force that characterizes Teotihuacán, and it seems clear that no single Maya city-state controlled much more than the confines of a single district. There is, however, significant evidence of the mercantile and political influence of Teotihuacán on the Mayan city-states of the Petén. When Teotihuacán fell, its influence on the Maya lowland halted; the new freedom seems to have stimulated the Maya cultures to even greater intellectual and esthetic achievements.

The Maya city-states were apparently stratified societies with political power vested in kin-based lineages, which controlled the masses through magico-religious processes. The need for a strongly cohesive state in the Maya lowland during the Classic Era, however, was apparently minimal—a fact evidenced not only by the absence of fortifications but also by incredible building activity, both indicative of a period of prevailing peace. The collapse of the Maya Classic culture around A.D. 890 has variously been attributed to massive epidemics, agricultural collapse, and internal peasant revolt, but the simultaneity of the collapse with the crisis overtaking the northern Classic cultures in and around the Valley of Mexico would appear to be more than coincidental.

The Chichimec Invasions

The northern drylands were dubbed the "Gran Chichimeca" by the Spanish, deriving the title from "Chichimec," the Nahuatl term meaning "sons of dogs," referring to the northern nomads. The period of Chichimec invasions forced the defending societies to become less theocratic and more secular and militaristic. The cities and towns built after the 9th and 10th centuries are well exemplified by the walled city of Xochicalco, the apparent leader in central Mexico after the fall of Teotihuacán. The remains of the city with its hilltop acropolis, ramparts, moats, and defensible terraced hillside suburbs are located on an artificially leveled site on the Central Plateau in the present state of Morelos, just south of the Valley of Mexico.

The Toltec State

The years of chaos that followed the fall of Teotihuacán ended with the rise of the Toltec state, an amalgam of elements probably of northern and western origin, the dominant tribe being the Toltec-Chichimecs. The Toltec city of Tollan, near the modern city of Tula, was legendary as a paradise on earth to succeeding Indian cultures. The city's control and cultural dominance reached approximately as far as that of Teotihuacán. Toltec rule and influence were not universal, however, for the Zapotec culture based at the city of Mitla and the Mixtec culture of western Oaxaca remained largely outside its orbit. Yet, the Toltec culture was to have far-reaching effects on the rest of pre-Conquest history.

The founder of Tollan, Topiltzin Ce Acatl Quetzalcoatl, is a figure whose saga, half history, half myth, became perhaps the single most important element in the fall of the Mesoamerican Indian cultures and in their incorporation into the Spanish Empire. "Quetzalcoatl" derives from *quetzal*, a rare bird; *coatl*, the Nahuatl word for snake, is made up of *co*, the generic Maya term for serpent, and *atl*, the Nahuatl word for water. The name signifies, then, a cosmically complete mythological character embodying water, earth, and the heavens.

The saga of the historic Toltec ruler Topiltzin Quetzalcoatl merged with religious myths and in this form was transferred to the Aztecs. The pacifism of Topiltzin Quetzalcoatl was opposed by the cult of Tezcatlipoca, the sinister god of the "smoking mirror," and of the subterranean depths through which the Sun must pass in its transit of the night. This apparently historical struggle between cults was transformed in legend into a struggle between the wind god, an aspect of Quetzalcoatl representing spirit freed from matter, and the god of the smoking mirror, a portrayal of the material world.

Tezcatlipoca forced Quetzalcoatl to flee Tollan. Arriving at the Gulf Coast, Quetzalcoatl is said to have embarked with his followers on a raft of serpents to the east to found a new Tollan, promising to return in the year One Reed of a future calendric cycle. The flight of Topiltzin Quetzalcoatl appears to coincide with the Mayan account of an invasion of the Yucatán Peninsula by a Toltec group said to have been led by a man whom they called Kukulcán, or "Plumed Serpent" (also the archaeological symbol for Quetzalcoatl in Toltec-Aztec sites) and designated as the founder of Chichén Itzá. This myth-history sowed the seed of the future destruction of Indian civilization in Mexico, for the conquest was to begin on the birthday of Quetzalcoatl in the year One Reed.

Under the followers of Tezcatlipoca, the Toltecs became aggressive militarists and expansionists. Over the following 200 years, their empire probably reached its greatest extent, controlling most of central Mexico from coast to coast. Drought and factional strife brought down the rule of Tollan in 1168, and there ensued a turbulent second "Chichimec interregnum," a new flow of northern nomadic "barbarians" into the Valley of Mexico. The entering tribes established city-states on the heavily populated shores of the five lakes of the Valley of Mexico, and the prize for which they fought was the control of the Valley—and with it, the control of civilized Mexico. The rulers of each of these city-states, however, claimed "legitimacy" via assumed direct descent from the dynasties of Tollan, and, in particular, from that of Topiltzin Quetzalcoatl himself.

The Aztecs

In the early part of the 14th century, a small band of Nahuatl-speaking nomads, the Mexica-Aztecs, entered the Valley of Mexico from Aztlán in the west of Mexico. Legend has it that Huitzilopochtli, the personification of the noonday Sun and of war, had designated the Mexica as his chosen people, commanding them to wander until they came to a spot when an eagle perched on a prickly pear holding a writhing snake in his beak. Here they were to build a city which would in time rule the world. The Mexica-Aztecs came upon the prophesied sign in some swampy, unoccupied islands off the western shore of Lake Texcoco; here they began in 1344 the city of Tenochtitlán, which within 100 years came to rule the Valley of Mexico, only to fall within a similar span of time to the Spanish Empire. The mystic symbol has become the Mexican national emblem, the center of the Mexican flag; Tenochtitlán, the modern capital, Mexico City; and, the tribal name of the Aztecs, "Mexica," the name of the country.

The ascendancy of the Aztecs began in 1367 with their agreement to serve as mercenaries to the expanding Tepanec civilization. When the Tepanec king died in 1427, the Aztecs turned on their mentors and destroyed their city. Tenochtitlán then entered into a Triple Alliance with the city-states of Texcoco and Tlacopán (now Tacuba), a confederacy that was to maintain control in the Valley of Mexico until the coming of the Spanish.

From 1440, the Aztecs and the city of Tenochtitlán exercised hegemony over the triple confederacy and subordinated the foreign policy of their allies to their own ends. By 1502, the Aztecs controlled most of the territory in central Mexico and down into present-day Guatemala. Conquest was not by colonization but by feudal incorporation, opening trade routes, and dominating markets. Yet they were unable to conquer and confederate other centralized states, such as the Tlaxcalans and the Tarascans, which later joined the Spanish side to bring about the end of the Mexica hegemony.

The areas under Aztec rule have been estimated to have included some 7 or 8 million people—more than the whole of Mexico would see again until about 1850. The settlement patterns in the Aztec regions, particularly in the Valley of Mexico, were more urban than they would be again until modern times. This dense population was viable because of complex agricultural zoning, intensive irrigation production techniques, and a high degree of specialization and intercommunity trade. The general organization of the communities was similar to the colonial towns or the modern cities. Each city- or town-state was dominated by a central community of several thousand inhabitants. This political, religious, and commercial center was surrounded by a number of small dependent villages most of which lay within 4 or 5 miles of the main town. The central community was usually made up of numerous neighborhoods specializing in particular crafts, which were territorial as well as sociopolitical units.

The Aztec capital of Tenochtitlán, with a population perhaps as high as 300,000, was more the head of an empire than the center of its city-state, although its urban structure resembled that of lesser cities, such as Texcoco, Tlacopán, Cholula, and Tlaxcala, many of whose individual populations probably exceeded 50,000 people. The island-capital was connected with the mainland by three causeways, across the western one of which ran the masonry aqueduct to the city from the spring at Chapultepec.

In the Indian communities of the Valley of Mexico, the ideal urban pattern was a grid centering on a large open-air market (as in Tlatelolco) or a square housing the complex of key religious and administrative buildings (as in the case of Tenochtitlán), not very different in basic design from the ideal of the Spanish conquerers. Congestion was particularly pronounced in Tenochtitlán and the surrounding area. The city was crisscrossed by canals which made possible the "backyard" floating gardens. The canals, together with the artificial agricultural islands in an area of scarce land and growing population, squeezed the people into pockets on the islands. In spite of the floating gardens the city was basically supported not by agriculture but by commerce, as Cortés later proved by starving the city into submission.

There ascended to the throne in 1502 of this strong but still diffuse hegemony Moctecuhzoma Xocoyotzín (Montezuma II or Moctezuma II); he was a complex and meditative ruler, not the single-minded militarist and powerful organizer typical of the previous Mexica kings. His beliefs were increasingly pervaded, as was the Aztec religion, with an obsession with death and tragedy, an inherent sense of pessimism and doom. At the same time, the increasingly frequent ritualized "blossoming wars," waged to obtain sacrificial captives, had become a source of serious and damaging disaffection in the Aztec hegemony.

As the calendar cycle approached One Reed, the date of Quetzalcoatl's promised return from the east, Moctezuma II was confronted with a series of terrifying portents. Many of these signs bore ominous resemblance to the phenomena which in legend had destroyed life in four former ages, each symbolized by a particular sun—and the Aztecs believed they lived in the era presided over by the fifth and last sun. Given the basically opposing ideals of Quetzalcoatl and Huitzilopochtli, the possibility of the imminent return of Quetzalcoatl presented Moctezuma and the Aztec nation with an insoluble religious dilemma—whether to submit passively to the will of the god or to confront him in battle in the hopes of the protective blessing of Huitzilopochtli. It was at this juncture that the Spanish landed.

THE SPANISH PERIOD: IMPORTATION OF EUROPEAN CULTURE

The Conquest

Hernán Cortés arrived out of the east on the day Nine Wind in the year One Reed—the birthday of Quetzalcoatl in the year of his prophesied return. This was Good Friday according to the Christian calendar, April 22, 1519. He landed at a spot on the Gulf Coast of Mexico that he named Vera Cruz (true cross) for the holy day of the Spanish arrival. Cortés was light complexioned, dark bearded, and attired in black as a consequence of its being Good Friday, he fit perfectly the traditional description of Quetzalcoatl. The apparent fulfillment of the prophecy led to a paralysis of Aztec national will and a collapse of national morale.

Elements of Cortés's appearance may have been planned. One of the key sources of Cortés's knowledge of the relevant Indian legends was a Nahuatl-speaking noble's daughter, Malinche (Doña Marina). Presented to the Spanish by the Centla Indians of Tabasco, she played a leading role in the Conquest, both as an interpreter of the Maya and Nahuatl languages and as the mistress of Cortés.

Hernán Cortés had been chosen by the Cuban governor Diego Velázquez to lead an expedition to Mexico. Velázquez, however, once having selected Cortés, became wary of him. Aware of the governor's desire to replace him, Cortés stole away from Santiago, the capital of Cuba, and completed preparations in Havana. The expedition set out with 508 swordsmen, 100 sailors, 32 crossbowmen, 13 musketeers, 14 cannons, and 16 horses. After the initial landing at Vera Cruz, Cortés cut off communications with Velázquez, had himself chosen as Captain General of the new town, sent one ship directly to Spain to secure royal ratification, and burned the remaining ten ships.

Moctezuma, receiving word of the newcomers, soon realized that they were human, feared that they were the symbols, the representatives on earth, of otherworldly forces. Religious factors aside, the inherent weakness in Aztec governance through a tributary confederation undermined any serious long-range defensive posture. The *pueblos* or city-states between the Valley of Mexico and the coast were independent, if tributary, communities. Thus, as the Spanish *conquistadores* marched inland, they were able to exploit not only spiritual but also political weaknesses in the Indian realm. Many tributary tribes, such as the Totonac, welcomed the advent of the *conquistadores* as an opportunity for revolt. The independent Tlaxcalans, on the other hand, tested them twice in battle, lost, and became the most important and loyal of Cortés's Indian supporters. At Cholula, a religious center connected with Tenochtitlán, the Spaniards were met as friends, but in a political maneuver perhaps instigated by Moctezuma, the Cholulans secretly plotted the destruction of Cortés's forces. Suspecting such, the *conquistadores* counterattacked in a well-planned massacre. This massacre in Cholula, together with the later execution of Cuauhtémoc, are always pointed out when Mexicans speak of Cortés. They admire his leadership and military abilities, but they feel that such massacres destroyed the possibility for a quiet and peaceful blend of the two cultures.

Cortés arrived at Tenochtitlán on November 8, 1519. Both practical and psychological considerations induced Moctezuma to allow the *conquistadores* to enter the capital in peace, but Cortés seized Moctezuma hoping to control the Aztecs through the king. This triggered a mass resentment against the Spaniards. Just at this juncture Cortés was forced to leave for the coast to counter the arrival of a force under Pánfilo de Narváez, sent by Velázquez to relieve Cortés. The trouble brewing in Tenochtitlán broke during his absence. Perhaps in the mistaken belief that a gathering of the Aztecs for a celebration of the feast of Huitzilopochtli was a prelude to an attack on the Spaniards and their Tlaxcalan allies, Pedro de Alvarado, left in command, massacred the celebrants. The city rose up and drove the Spanish forces to cover. Having routed Narváez, Cortés returned with an enlarged force to find the garrison beseiged. Because the ceremonial character of Aztec warfare did not envisage the splitting and separate destruction of an adversary's army, Cortés and his reinforcements were allowed to rejoin the beleaguered Alvarado.

Unable to break from the surrounded refuge, Cortés attempted to have Moctezuma pacify the populace, but they bitterly turned on their king, stoning him fatally. The Aztec nobles then elected Moctezuma's brother, Cuitláhuac, as king, and the Aztec will to fight was revived. On the night of June 30, 1520, the Spanish and Tlaxcalans attempted to steal out of Tenochtitlán. Discovered, the allies were set upon by the whole male population of the capital, and within a few days three-quarters of the Spanish army was lost. The Aztecs failed to follow their advantage and destroy the remnants of the *conquistadores;* instead they spent time plundering the dead and recovering stolen Aztec treasures.

The exhausted Spaniards, many of them wounded, fled, only to be intercepted and set upon at Otumba by the Texcocans. Because the Indians would not break their ceremonial battle formation, they could not overcome the mobility and tactical superiority of the Spaniards, who routed them after a desparate fight. Reaching Tlaxcala, Cortés rested his army and then set about consolidating his position—launching two new campaigns, one eastward toward the sea and the other southward and westward into present-day Morelos.

In his subsequently renewed offensive against the Aztecs, Cortés, through luck and the defection of the Texcocans to the Spanish side, was virtually assured victory. The defection gave the *conquistadores* a base on Lake Texcoco. From there they launched an attack on Tenochtitlán by a fleet of small galleys that had been constructed in Tlaxcala, armed with cannon, and brought overland to be assembled on the lake. The naval attack was launched on May 26, 1521, in concert with land attacks along the three causeways into the capital. Tenochtitlán was slowly starved out: its people retreated into the center of the city, which allowed the Spanish to raze building after building, to fill the canals with the debris, and thus to provide themselves with maneuvering room. In their religiously inspired efforts to capture the invaders alive, the Aztecs often gave them a chance to escape, a fact that helped to seal the Aztec defeat. The siege ended on August 13 with Tenochtitlán completely destroyed. The Conquest of the Valley of Mexico had now been consummated—some two and a half years after it had started.

The siege of Tenochtitlán produced one of the great national heroes of Mexico—Cuauhtémoc, last king of the Aztecs, elected after the death of Cuitláhuac. Cuauhtémoc is revered as a personification of dignity and valor, Indian heritage, and heroism because of his courageous last stand during the siege of Tenochtitlán, his subsequent stoicism in the face of captivity, and then his execution as a conspirator against Cortés. For many Mexicans, Cuauhtémoc is the "young grandfather"—the original patriot.

THE PERIOD OF HISPANIC DOMINANCE

The Consolidation of the Conquest in the Center and South

Cortés fought on his own responsibility, against the will of his superior but in the name of and on behalf of the King of Spain. In Cortés's mind and in the minds of his soldiers were the opposing concepts of service to the Crown and the Catholic Faith, and self-serving gain of glory and personal wealth.

With the fall of Tenochtitlán, Cortés, without royal sanction until 1522, began the rebuilding of his new capital on the ruins of the old city—a decision which may well have laid the foundation for the racial and cultural synthesis and harmony that later came to set Mexico apart. Cortés's view was feudal; he rewarded his fellow *conquistadores* for their services through the Spanish baronial land grant system. This creation of individual fiefdoms served to confirm the king's suspicions of Cortés's independent aspirations; Cortés was soon relieved of his leadership and replaced by the first American viceroy.

Conquest and colonization radiated outward from central Mexico in two phases, a rapid overrunning of the central and southern Mesoamerican high Indian cultures and the relatively slower settlement of the northern areas of the low Chichimec cultures. Two factors tended to determine the course and direction of the first territorial conquests, generally completed by about 1540: first, the location of concentrations of Indian population, the source of both labor and tribute for the feudal land grant system; second, the major sources of pre-conquest tributary gold, the southern highlands and the northern Caribbean slopes of Central America. In 1522 expeditions moved northeastward into the Huastec region as far as present day Tampico and northwest-ward into Tarascan country around Lake Pátzcuaro. In search of gold, Spaniards moved southwestward through the Balsas Basin to the densely populated, cacao-rich, Coatzocoalcos region in the Isthmus of Tehuantepec. The religious orders and lay Spaniards followed the original *conquistadores* into these areas, introducing wheat, sugar, and a livestock industry—administering and controlling the Indian population through the founding of towns at strategic points.

Subsequent expeditions from the Valley of Mexico were made first into the highlands of Guatemala and Chiapas and then onto the Yucatán Peninsula. Stiff Indian opposition and lack of precious metals meant that these regions were only lightly held, and the native Mayan cultures were little disturbed for most of the colonial period. Even today, these areas retain a predominantly Indian culture (see ch. 5, Ethnic Groups and Languages). The final important thrust within the high culture region took place into the Pacific coastal lowlands, with the ravaging of the dense western Indian population and the founding of the towns of Guadalajara and Compostela. At the northwestern margin of the Mesoamerican area, the Spaniards founded the town of Culiacán, which came to serve as a slaving center and a launching point for further northward expansion. In the lands conquered during this first phase of expansion, the densest populations in Mexico are still to be found.

The Extension to the North

Movement north beyond the Indian agricultural line and into the Gran Chichimeca or Tierra de Guerra (Land of War) did not occur until after 1540. Occupation of these lands was a difficult and slow task, taking over 200 years to accomplish. Among the intractible nomadic Chichimecs, neither the land grant system (which was legally but not effectively abolished in 1542) nor tributary subjugation could be implemented. The labor force, therefore, had to be imported from the south, recruited out of the Indians of the central highlands. Settlement was not in towns but in mining camps, later major cities (Zacatecas, Guanajuato, Parral, Chihuahua, and San Luis Potosí). The persistent raids by the desert Indians meant that the Spanish administration of the north was usually in the hands of the military, through a series of forts stretching along the invasion routes. However, where minerals were lacking, the Church, active among the Indians of the north, frequently became the more important force.

Two events opened the way for the first northward conquest and colonization: first, the driving back of the Guachichil nomads north of Guadalajara in the Mexton War of 1541, and second, the discovery in 1546 of silver at Zacatecas. The Zacatecas mines, together with the Guanajuato silver mines opened in 1563, brought in Indian farmers, Spanish missionaries, and ranchers who took over the Bajío and the Aguascalientes Valley, and fostered the establishment of the market centers of Celaya and León. From this base the first important northward path was pushed along the eastern foothills of the Sierra Madre Occidental, through the great silver belt of Northern Mexico—Durango (1563), Parral (1631), and Chihuahua (1703). Via this route travelled the expedition which settled the upper Río Grande Valley of New Mexico and established the town of Paso del Río, present-day El Paso, Texas.

The second defeat of the Zacateco-Guachichil Indians in 1562 opened up a second major route, that was slowly extended northeastward from Zacatecas through Saltillo (1577), Monclova, Monterrey, Cerralvo, and beyond the Rio Grande to San Antonio (1718). These areas remained sparsely settled and poor, depending on stock raising, throughout most of the colonial period. Direct contact was not opened with Mexico City until the founding of San Luis Potosí in 1592; government-sponsored settlement of the northeastern coastal area was not initiated until the mid-18th century, when the French and British had begun to threaten the frontier from the Mississippi Valley.

The third major route was opened by Jesuit missionaries. It proceeded northward up the western slopes of the Sierra Madre Occidental along an ancient Indian trail through Sonora to the Colorado Plateau. This trail had been used in 1540 by Francisco de Coronado on his expedition seeking the legendary Seven Cities of Cíbola. Baja California was opened through the establishment of missions in the late 17th and early 18th centuries. The threat of Russian expansion from Alaska caused the Spaniards in 1769 finally to begin, through the Franciscan friars, the colonization of upper California.

Indians in the Spanish Period

One fundamental concomitant of Spanish colonization was the decimation of the Indian population (see ch. 5, Ethnic Groups and Languages). The pre-Conquest native population of Mesoamerica of 18 to 25 million was reduced to about 2.5 million within 50 years of the Conquest and to little more than one million after the first hundred years of Spanish occupation. This incredible mortality was caused by warfare, harsh treatment, dislocation, disruption of normal food production, and slavery and introduced Old World diseases.

In the sparsely populated rural north the Jesuit and Franciscan missions came to be the basic instrument of administration. The large Indian nations of the center and south were broken up and reduced to their constituent city-states, now under the administrative leadership of the chief who had been the native ruler of the village or town during the pre-Conquest period. Thus, in these dense high cultures the secular native city-state became the unit into which was introduced the Spanish concept of town government.

Differentiation between the Indian in the administrative centers and the outlying communities gradually became less important. The resettlement of scattered Indian communities into more compact towns was in large part the product of gradual appropriation by and encroachment of Spanish landed interests onto royally decreed "public lands" and "wastelands" created through the great population decline of the 16th and 17th centuries. While the ultimate effect of Spanish rule was to destroy stratification in Indian society and in its stead to equalize all native classes to the level of the former commoner class, distinctions continued to survive in Indian society as some native nobility retained rank and holdings, if not power, until after independence. This was because the Spanish ruled the Indian towns through native leaders and, as a consequence, provided social privileges for the Indian nobility. However, while the powers of the local chiefs lasted longer than those of the Spanish colonial leaders, these Spaniards evolved into a property-based class, a transition made by but few Indians.

The conversion of the Indian was more complete in urban areas. There he came into closer contact with both the Spaniard and the Church. In the more rural areas Catholicism was outwardly accepted but Indian rites and practices were carried on underground. The Indian has never fully lost his traditional beliefs and has never fully accepted the strongly individualistic attitudes of Western man, a fact which has strongly colored the ongoing Revolution (see ch. 12, Social Values; ch. 17, Political Values and Attitudes).

The Negro in Colonial Mexico

It is estimated that nearly 250,000 Negroes were brought to New Spain, although in any given year the incoming number seldom exceeded 35,000. They were brought as slaves in response to the labor shortage resulting from the decimation of the Indians.

The monarchy integrated the Negro as it had the Indian into the structure of colonial society. Thus, royal decrees and Church proclamations were handed down providing that slaves be allowed to purchase their freedom, that family solidarity and marital sanctity be guaranteed as a Christian obligation and as a means of assuring tranquillity, that the disciplinary authority of the master be restricted, and that the African be Hispanicized to bring him into community with his master. Over time the Negro has virtually disappeared as an identifiable element in the *mestizo* population.

Mestizaje

In 1810, despite racial mixing, probably as much as 60 percent of the population of New Spain was still of pure Indian blood. The Indians' rank in the Hispano-Catholic social order was higher than that of the Negroes, but lower than the mixed-blood peoples, the *zambos* (Indian-Negro), the *mulatos* (Negro-European), and the *mestizos* (Indian-European). However, the pure Indian was a ward of the state and the Church, a "child," needing protection. The *mestizo*, on the other hand, usually was left outside of both Indian and Spanish communities; because his features were generally distinctive, he had little chance of moving to a higher station in life (see ch. 6, Social Structure). To avoid the degeneration and social deprivation of the urban areas, many *mestizos* migrated north to Durango, Coahuila, and Nuevo León, becoming cowboys, ranchers, miners, or tenants—the backbone of the northern stock of the contemporary Mexican people.

Spanish Sources of Power

In general, then, the "subject races" became the laboring base of society, thus reinforcing the Spanish notion that manual work was a symbol of servility, and associating both with race. It was the Spaniards, both Iberian-born (*gachupines*) and American-born (*criollos*), who wielded power and controlled the wealth of New Spain. However, this power was severely circumscribed by the Spanish Crown. The structure of colonial jurisdiction was designed to consolidate the absolute power of the monarch, assisted by his Council of the Indies.

The Bureaucracy

The Crown used three institutions to maintain its patrimonial authoritarian rule: the bureaucracy, the Church, and economic monopoly. The royal power in New Spain was ostensibly maintained through an administrative hierarchy headed by the viceroy. The colony was divided into provinces administered by governors (who sometimes also held the title of captain-general) and these were subdivided into smaller political and juridical units entrusted to magistrates or mayors. The lowest governing unit was the town or city council, the only institution to possess any measure of self-government. Unlike all other positions, whose offices by law were required to be held by the Iberian-born, the city council membership consisted largely of the native-born. As a consequence, the councils had little effective authority. The administration of such a complex government, however, meant that certain practical flexibilities began to evolve. First, the slow communication with the mother country meant that edicts promulgated by the Crown could easily be evaded or ignored. Often an official would simply either fail to implement directives or postpone their execution until clarification of the local situation was sent to and passed upon by the Court.

The selling of offices in the town councils became common, but did not essentially encroach upon royal authority because the powers of the councils were limited; it did provide, however, the means whereby the landed oligarchy gained control of the local, minor administrative apparatus—a control that came to burden the common people so heavily that it would serve as an impetus for the Revolution of 1910. Once an oligarchy became entrenched in public office it resorted to graft and nepotism and to increasing the number of jobs under their patronage—perhaps the beginning of the *empleomanía* (inordinate desire to attach oneself to the public payroll) which has persisted into contemporary Mexico.

The thrust of Spanish colonialism was town centered. Spanish towns in Mexico were created by corporate charter instead of growing up naturally. There was, thus, an "artificial" character to the Mexican town, a duality underscored by the regulations on municipal configuration contained in every civic charter. The specified urban grid patterns were characterized by a sense of subordination to a central will, symbolized by the *plaza*, the focus of the town; around it were the symbols of Spanish dominance—the church, the town hall, the residences of Crown officials.

In an attempt to curtail corruption, the new Bourbon monarchy of Spain made no less than five changes in the administration of New Spain between 1758 and 1804, the most important for municipal government being the system of provinces and provincial administrators adopted in 1786. The purpose was to coordinate colonial administration in Mexico, the provincial administrator in effect assuming the powers of the governor, the magistrate, and the mayor. This official exercised control over the principal governmental functions of the town, especially in the field of municipal finance. Obviously, the town council became dependent on his authority. The general effect of this reform was to weaken the council even further as the Empire grew older. Yet, the town council remained the only organ of government open to the native-born, and the tradition of the open town council was never forgotten; the institution quickly revived during the Independence period and was the avenue through which the men of native birth began to assert their influence.

The Spanish Constitution of 1812 introduced the concept of decentralized administration by regions headed by provincial governors, officials who—in the fashion of bosses—usurped the powers of the town and city councils. Bossism later came to haunt Mexico during the regime of Porfirio Díaz; the provincial boss, in his region, commanded violent force, perpetuated electoral fraud, "prepared" the tax lists, and supervised and directed numerous other jobs as well as the town councils themselves. A principal cause of the Revolution of 1910 was popular dissatisfaction with the bosses; the country has had, however, great difficulty in overcoming this heritage of weak municipal government run by a privileged few.

The Church

The second major source of the royal authority derived from the king's relation to the Church. The Church was an integral part of the power of the state in New Spain. It enjoyed special privileges as "a state within a state," which compensated for the spiritual authority the Church provided as a buttress to the king. The alliance of Church and Crown was sanctioned by the institution of royal guardianship for the Church, whereby the king received from the papacy the right to make all ecclesiastical appointments and to control ecclesiastical revenues. This interrelationship was underscored by the requirement of reading before the Indians of New Spain a proclamation which demanded absolute allegiance to the Church as well as to the Crown.

The enormous task of modeling New Spain after Hispanic patterns devolved largely upon the Church, through its monoply not only of education but also of most social services. The Church was also able to enforce intellectual and political orthodoxy through the Office of the Holy Inquisition, established in New Spain in 1571. As the colonial period progressed, however, the Church tended to become somewhat estranged from the imperial order as it came to participate directly in the economy of New Spain. The Church became an avenue to security for many native-born men who could not otherwise find a place within the colonial political or economic order.

Its use of Indian labor, the tithes it received from the Crown, and innumerable gifts from both the Crown and rich laymen made the Church the wealthiest corporation in New Spain. Its enterprises, in particular the extremely successful Jesuit accomplishments in agricultural production and in manufacturing based on Indian crafts, were models of early capitalistic organization. Because of its enormous revenues and its corporate functioning, toward the end of the colonial period the Church controlled most of the liquid capital in New Spain; as a result it became the main lending agency in the colony, especially for the large landowners. Because of foreclosures on unpaid loans, the Church held approximately one-half the total real estate of New Spain by the beginning of the 19th century (see ch. 25, Banking and Currency).

Thus, despite its initially close relationship to the Crown, the growing power of the Church in the New World began to pose a threat to the royal authority—one difficult to challenge because of the legal rights enjoyed by the clergy, including the exclusive jurisdictions of the clerical law courts. Unsurprisingly the Crown began to move toward anticlericalism, initially manifested in the royal decree of 1717 directing that no further conventual establishments be created in the Indies. Finally, in 1767 the king ordered the Jesuits expelled from the Indies.

Some of the lower clergy were receptive to liberal ideas, even to the point of becoming influential in the movement toward Independence. The leaders of the Church, however, continued to use their immense influence to support conservative political principles as well as orthodox religious beliefs. This conservatism eventually led to the prolonged series of conflicts between the Church and the secular elements of society after Mexico had achieved independence from Spain.

Mercantilism

The third element upon which Spanish authority depended was a mercantilist conception of economics. The royal power was strengthened directly by a vast increase in the Crown's revenues and indirectly through an increase in the capacities of the population to contribute. The new laws of 1542, abolishing the land grants, were an attempt to eradicate an institution whose feudal autonomy challenged the authority of the central power. The further purpose of the new laws was to preserve the Indian population as the labor mass upon which the economic foundation of royal power in New Spain could be maintained.

The core of the Spanish mercantilist system was the Spanish monopoly on trade with the colonies established through the House of Trade situated in Seville, the only port in Spain legally authorized to handle shipping to and from the Indies; annual or twice-yearly fleets in which all goods to and from the Indies had to be hauled; and, most importantly, the powerful merchant guilds which monopolized trade with the Indies. The Crown, however, did maintain direct monopoly rights over the production and sale of a number of items on which excise taxes provided a valuable source of revenue to the king. Outside the royal monopolies, production and sales of those goods of particular importance in New Spain, livestock and minerals, were assisted by special guilds. The powerful guild of livestock owners was transferred to New Spain. While the agricultural consequences were not quite so harmful as they had been in Spain itself, the special privileges allowed livestock owners were attractive both economically and in terms of status.

The mining industry was regulated by codes of law, the specificity of which had prevented mining techniques from developing much beyond their original level. By 1760, in spite of new and rich strikes, the decline in production and royal revenues from silver mines had become a serious concern to those in charge of revenues. In 1777, a royally chartered mining guild, dominated by the native-born, was created in an attempt to revitalize the mining industry and give it a comprehensive structure. The operations of the guild served to establish mineral production as the traditional basis of royal and state income, tending to reinforce the economic concept that silver mining was the real basis of Mexican and royal prosperity—an attitude that blighted the expansion and diversification of the Mexican economy until well into the 20th century.

The middle groups of colonial society—the mixed-blooded peoples and the lesser native-born people—were unprotected by the Crown, had little access to land, labor, or capital, and were dependent on the wealthier native-born influentials for their livelihood. The local crafts were governed by a rigid monopolistic guild system, of the classic European pattern, and regulated by a series of anachronistic directives issued by the town councils and sanctioned by the viceroy. If a craftsman were a member of a guild, he had access to the group of masters and employers who controlled the industry; if not, he was barred from the craft. Although the drag of the guilds on local industry was recognized as early as the beginning of the 17th century, the system was not abolished until 1861; traces of it remain in the late 1960's in such industries as glassblowing and silverwork.

Directly linked to the mercantilist economic structure and thus beneficiaries of royal privilege were the powerful merchant-consuls, closed groups of the Iberian-born that were given a monopoly in import-export operations. Because of their dependence upon oceanic trade with Spain, the merchant-consuls were strongly oriented toward royal and Spanish policies. Their purview was the purchase and sale of goods at wholesale, but through close collaboration with the colonial government they came to control the flow of goods; this made them able to increase prices drastically and to generate large profits. The nature of the merchant-consuls, their monopoly of international trade, and their fostering of the rising local prices stood in the way of the growth and development of colonial industry and commerce. They became both the favorite target of attacks on Hispanic dependency from the less-privileged native-born and the stanchest partisans of resistance to change.

Land and the Failure of Mercantilism

While the legal status of the Iberian-born and the Mexican-born was the same, the Mexican was in practice generally excluded from places of responsibility and authority. It is not surprising, then, that some of the most successful Mexicans during the 18th century operated on the fringes of the economy, in the area of blackmarkets and contraband opened by the imperfections in the mercantilist monopolistic system. More often, however, the wealthy Mexican took to land ownership to gain social recognition in the colonial Hispanic culture.

The tradition of the gentleman on horseback made land a prerequisite for social prestige. The taint placed by the Spanish system on manual and commercial activities helped to reinforce this traditional approach to social status. Thus, particularly in the regions distant from the viceregal capital in Mexico City, a Mexican landed elite came to thrive on the basis of municipal land grants, assertions of *de facto* rights to vacant lands, sequestration of municipal common lands or Indian common holdings, or purchase of lands from the local Indian chiefs. This was to become the basis of the estate system, typical of 19th-century Mexico and a primary grievance in the Revolution of 1910. The estate owners found on their remote estates a *de facto* autonomy from the centralized state. Yet, they governed their lands with much the same paternalistic attitudes, giving the legally free Indian labor access but no rights to land while holding them in bondage through a system of peonage or quasi-forced labor based on systematic, chronic indebtedness. The estate owners, in their desire for more autonomy, joined forces with others beginning to push for independence from Spain toward the end of the colonial period; from their position evolved both oligarchic and localistic trends that prevailed in Mexico until the Revolution and beyond.

The mercantilist system proved to be the weakest link in the structure of royal rule, for its success required both naval supremacy and an expanding market in Spain to absorb colonial production; both were in decline by the 18th century. Worse, the system of taxes became more onerous and the venality of high officials and the merchant-consuls increased. The reform of the provincial administrations in the late 18th century was meant to forestall collapse, but the new freedoms only helped in the long run to undermine the waning authority of the Spanish Crown.

FREE MEXICO: EVOLUTION OF A NATION

Rumblings of Revolt

The wealth and importance of New Spain by the end of the colonial period made it by far the prize possession of the Crown, but the more liberal reforms of the Burbon monarchy came too late and only reinforced the restive spirit.

The neo-Thomist Francisco Suárez prepared the way for some Spanish Catholics to accept portions of rationalist thought by arguing that legitimacy derived from public consent and that when law became unjust or when central authority was lacking, power reverted to the people. His thinking provided justification for disobedience in the name of "popular sovereignty" and "the social contract," while at the same time condoning the centralization of power in the hands of individuals in small groups.

His more democratic ideas were adopted by a Mexican group made up principally of lawyers and the lower clergy, including many members of the Literary and Social Club of Querétaro. Miguel Hidalgo, José María Morelos, Vicente Guerrero, Ignacio Allende, Andrés Quintana Roo and his wife Leona Vicario, Juan Aldama, and Miguel

Domínguez--all were destined to play key roles in the Independence movement. These were the "reasoning gentlemen" who were influenced by the French rationalists, particularly Montesquieu, Voltaire, Diderot, and Rousseau, and by Adam Smith's *Wealth of Nations*. Many were anticlerical freemasons as were their sympathizers (the lower clergy included). They adopted the ideas of the *Philosophical and Political History of the Indies* of the Abbé Guillaume Raynal, which bitterly attacked Spain's treatment of American natives. Alarmed by the content of the new writings, the Inquisition in the 1790's attacked both the printing and discussion of these ideas, forcing the liberals underground where they became even more imbued with the ideals of the contemporary French Revolution.

The far larger group of Mexicans, however, were anxious to keep the Indians subjugated and favored independence primarily in the hope of ousting the Spanish and becoming the new ruling class. They resented the fact that the Mexican elite were socially, politically, and economically subordinate to the Spanish. Excluded from the most profitable businesses by the monopolistic merchant-consuls suffering under the restrictive policies of the Crown, and politically unrepresented except in the weak town councils, the Mexicans became estranged from the Spanish colonial system, increasingly assertive of their "rights" and impatient with royal dictation.

In the cities which experienced a subordination both to the Spanish bureaucracy and to the monopolistic merchants, social exclusion and, above all, economic motives came to predominate over political alignments. A particular grievance grew out of the 1805 royal decree, known as the consolidation. This was a move to rationalize the rich real estate holdings of the religious orders by transferring their capital to the royal treasury for shipment to Spain. Since the religious orders of New Spain were the owners, lessees, money lenders, and principal mortgagors on landed property, the ensuing recall of all advances made by the Church hit its Mexican creditors hard. On the other hand, the French Revolution had alarmed the Mexican elite which, although wanting independence, mistrusted and feared the eventual stirring of the subject peoples.

The Struggle for Independence

The trigger for reveolt was Napoleon's occupation of Spain in 1808 and his attempt to establish his brother Joseph Bonaparte as king. The absence of the legitimate monarch, in Suárez's terms, justified a reversion of sovereignty to the people. The Spanish, fearing a movement for independence, supported as the legitimate authority the committees that governed the parts of Spain not occupied by the French. The Mexicans, on the other hand, asserted that sovereignty devolved on the people.

The conservative group, seeking moderate reform by existing authority and constitued law, sent delegates chosen by the town councils to Spain to take part in a constitutional convention. The liberal group insisted that natural rights and equality were basic and that the people created sovereignty.

The liberal group moved first. On September 16, 1810, Father Miguel Hidalgo y Costilla called his followers to rebel against the Spanish. The uprising of Indians against whites which ensued was joined by Querétaro club members Ignacio Allende, Juan Aldama, and Miguel Domínguez; the rebels sacked San Miguel el Grande (now San Miguel de Allende), Celaya, and Guanajuato.

The violence and the rise of the long-feared race war scared many of the Mexicans away from the Hidalgo movement; the propertied elite, in particular, preferred to cling to the security of Spanish law and order rather than risk their wealth and faith under independence. By November of 1810, Hidalgo had 50,000 followers and had marched to the Valley of Mexico. In hesitating to strike into the Spanish-dominated heartland, he destroyed the morale of his movement, which dissolved. The Spanish seized the initiative, gave chase, and crushingly defeated Hidalgo in the battle of Calderón near Guadalajara in January 1811. Hidalgo was tried by the Inquisition and he recanted, but was defrocked and shot as a traitor. His severed head and that of the also captured Ignacio Allende were hung for 10 years on a fortress wall in Guanajuato. Not for years could the damage caused by the desertion and destruction mines and fields be repaired. Too, grievances of race against race had devastating long-term effects.

The spirit of rebellion had not died. Father José María Morelos organized a band of raiders out of the rugged southern highlands, taking Acapulco and "liberating" most of Oaxaca in 1813 and harassing traffic on the Mexico City-Veracruz road. In November 1813, he called a congress at Chilpancingo to declare the independence of his republic of Anáhuac.

The next year, in a congress held in Apatzingán, a constitution rejecting the Spanish Constitution of 1812 was drawn up, largely by the veteran revolutionaries Carlos Bustamante and Andrés Quintana Roo; they provided for racial equality, the abolition of clerical and military privileges, and the distribution of land from the estates to the peasants. During 1814 and 1815 the fugitive band of revolutionaries went from town to town, briefly instituting the new constitutional regime. In November 1815, Morelos was caught by Spanish troops and shot, having faced the Inquisition without recanting. His programs later influenced those of both the *Reforma* and the Revolution of 1910.

The death of Morelos was followed by a rapid disintegration of the liberal wing of the independence movement, although a few revolutionaries, notably Vicente Guerrero, continued to lead guerrilla forces in the southwestern highlands of Oaxaca.

The socio-economic recovery of New Spain was well under way by 1820. Mines were coming back into operation, and Indian laborers were returning. Then came the news of the Spanish liberal uprising, with its call for restoration of the liberal Constitution of 1812, which the Bourbon monarch, once restored, had failed to maintain. This alarmed many of the higher clergy and elite, for it evoked memories of Hidalgo's race wars and Morelos's constitutional ideas. Rather than attempt to work out a compromise with the Spanish government, the more conservative Mexicans seized the initiative to head off the development of liberal strength.

The leader was Agustín de Iturbide, a well-to-do landowning Mexican who had been an officer in the Spanish army. Obtaining troops from the viceroy on the pretext of destroying the remnants of the Morelos forces, Iturbide instead joined up with Vicente Guerrero. In February 1821, the two issued the Plan of Iguala, announcing the independence and sovereignty of New Spain, the supremacy of the Catholic Church, the principle of monarchy with a dynasty separate from that of Spain, the equality of rights of Mexican and Spaniard, and absence of property confiscation. The Plan became the rallying point of the 19th century Conservatives. The rebel army moved with enthusiastic popular support; the viceroy soon capitulated and independence was won.

Faced with a movement to select a European prince as sovereign, Iturbide gathered sufficient support to claim for himself the position of Emperor of Mexico. In May 1822, he was crowned Agustín I. His "empire" included not only Mexico, but also the modern Central American republics (see ch. 2, Physical Environment). Although he seized available capital, then in desperation issued worthless paper currency, he still failed in financing his government, and was forced to abdicate in March 1823; the Central American states broke away permanently. Not long afterward a convention proclaimed Mexico to be a federal republic, through the Constitution of 1824, patterned strongly after the United States document.

Regionalism versus Centralism

The 19th century was characterized by a running struggle between the central authority and regional autonomy. The major power struggle was between Guadalajara, the stronghold of regionalist-federalism, and centralist Mexico City. Unlike Puebla and Veracruz, Guadalajara was not strongly dependent on the trade markets of the capital. It commanded the mining wealth and commercial markets as far as Aguascalientes and Bolanos. Its commercial influence determined the fates of the Pacific ports of Mazatlán, San Blas, and Manzanillo.

Zacatecas, however, challenged Guadalajara's control over the Bajío, to the north of Zacatecas, which had developed its rich agricultural resources in close interdependence with the mines. This territory north of Zacatecas had long been unfamiliar to the inhabitants of the center and south and, as a consequence, had developed a distinctive mining-ranching complex all its own, centered on the towns of Monterrey, Tampico, Parral, Chihuahua, and Mazatlán. Oaxaca and Chiapas also had been remote and removed from the Valley of Mexico long before the Conquest, and they continued to remain isolated and independent well into the 20th century. The Yucatán Peninsula, too, had been far out of the mainstream, and Mérida and Campeche both attempted to establish their rights to the Gulf coastal trade historically dominated by the Veracruz-Puebla-Mexico City monopoly. These historic regional influences still underlie the contemporary Mexican state.

Conservatives vs. Liberals

Under the republican influence of the Constitution of 1824, the two political factions that would dominate Mexico for the next 50 years began to take shape. The Liberals supported a federal system, a strong middle class that developed through agrarian reform and promotion of broad-based industrial growth, separation of church and state, secular education, and abolition of the clerical and military privileges. The Conservatives advocated centralized and authoritarian government and maintenance of Church and aristocratic power.

The political conflict was intensified by the rivalry between the United States Minister, Joel Poinsett, and the British charge d'affaires, Henry Ward, who personified the desires of their respective governments to achieve a dominant influence in Mexican affairs. Poinsett, who wanted Mexico to emulate the United States, gravitated toward the Liberals. Ward tended to favor the Conservatives. The battle lines were thus drawn that would tear the republic apart within 8 years of the signing of the Constitution of 1824.

The first president of the republic was Guadalupe Victoria, a hero of the independence struggles whose chosen pseudonym derived therefrom. With him appeared a new national flag, the red, white, and green tricolor of Iturbide's army with the traditional Aztec eagle-snake-cactus symbol. This is still the Mexican national flag (see ch. 17, Political Values and Attitudes). Victoria presided over a country sinking into anarchy.

A Conservative was next elected in 1828 and, fearing a challenge, attempted to seize the government. But the Liberals incited an uprising of Mexico City Indian beggars and put the aged Vicente Guerrero into the presidency. Guerrero was immediately confronted by a Spanish expeditionary force sent by Ferdinand VII to reconquer Mexico. Long aware that the invasion was coming, the Mexican government had offered the Spaniards in the country the choice of leaving or becoming naturalized citizens. Large numbers of them were deported, depriving Mexico of much of its small middle class and of considerable capital, which the Spaniards took with them. The Spanish attack at Tampico, when it came, was easily repulsed by General Antonio López de Santa Anna—making the latter a potent national figure. However, Guerrero's ineptitude in handling the crisis undermined his power; he was replaced by his Conservative vice-president, Anastasio Bustamante, who proved unable to prevent Mexico from slipping deeper into anarchy.

SANTA ANNA

Between 1832 and 1855 Antonio López de Santa Anna held the presidency of Mexico 11 times. A showman, an opportunist, and an egocentric, he nonetheless had a talent for sensing the mood of soldiers and politicians and gaining their support. He also had the advantage of the proximity of his plantation, Mango de Clava, to Veracruz and thus of being able to seize the city's customhouse, the only source of income for the Mexican government. Santa Anna, with the cooperation of the liberal federalist, Vicente Gómez Farías, easily unseated Bustamante as his inauguration drew near; however, Santa Anna withdrew to Veracruz, pleading illness, and left Gómez Farías in the presidency to carry out the Liberals' program.

He allowed Gómez Farías to assume power, intially, as a test of public sentiment. The Farías government passed the Reform Laws of 1833, which, consistent with the Constitution of 1824, continued the abolition of the Inquisition while maintaining Catholicism as the only religion of the Mexican nation. The reforms were aimed at decreasing the power of the army; creating a civilian militia; reforming the prisons and courts by striking out at the surviving privileges of the army, Church, and landed aristocracy; abolishing tithes; weakening the Church and its mission through secularization and retention of the state's privilege of nominating bishops; and establishing a system of lay education. The reforms were not, however, to be carried through. The Church proclaimed the chlorea epidemic of 1833–1834 a sign of divine punishment for a "godless" administration. With great fanfare, Santa Anna then emerged from Mango de Clava, expelling both Gómez Farías and the Liberal Congress, rescinding the Reform Laws, and drafting the centralist constitution known as the Seven Laws.

Texas Independence

Toward the end of 1835, the province of Texas, whose population of settlers from the United States then totaled more than 30,000, threatened to secede from Mexico, fearing a centralist regime would threaten their autonomy. Collecting an army of some 8,000 men from the environs of Mango de Clava, Santa Anna marched north. The Texas declaration of independence on March 2, 1836, precipitated the Mexican attack on the Alamo, in which the latter was overwhelmed and all its defenders killed. In pursuit of the fugitive Texas government, Santa Anna at Goliad massacred 300 Mexicans suspected of rebellion. The Texans were in total disarray and an effective follow-up might have quelled the rebellion. But, Santa Anna halted at San Jacinto Creek, without elementary perimeter precautions. The Texans fell on and routed the Mexican army. Captured, released, and finally negotiating the independence of Texas (although already unseated as president of Mexico), Santa Anna returned to his estate, defeated and humiliated, but not yet finished.

The Conservatives maintained control of the formal structure of government with the support of the Church and the army. But there was no true national government. Military bosses controlled the states, and the central government functioned only at the will of the army. Tyranny and correction were universal, and everywhere the socioeconomic system showed signs of retrogression. The enormous foreign debt owed (or alleged to be owed) by the Mexican government was staggering. Non-payment of French loans precipitated the Franco-Mexican War of 1838 and 1839. Lodged in the fortress of the San Juan de Ulloa, the French Army could not be ousted. Again, Santa Anna appeared from his retreat to "save" the country. The country continued to sink deeper into chaos, and Santa Anna, in a bloody coup, overthrew the government in 1841, establishing a puppet Congress which drew up the new centralist constitution of the Organic Bases; he assumed the presidency again in 1843. A military revolution once again ousted him in 1844, deporting him to Cuba and installing a moderate as head of the government.

Mexican-American War

The Texas problem had never been settled; Mexico never recognized Santa Anna's "settlement" and the United States had not incorporated the territory. The election victory of James Polk brought on the annexation of Texas in 1845. War broke out in 1846 as General Zachary Taylor met and defeated a Mexican force situated in the disputed area between the Rio Nueces and the Rio Grande rivers. Suddenly, Santa Anna reappeared in the country and at the head of a large army moved north to confront Taylor in the Saltillo area. In the battle of Buena Vista, after having apparently captured most of Taylor's strong points, Santa Anna inexplicably withdrew, leaving the field to the United States forces. Santa Anna nonetheless returned to the capital as though he had been victorious and ousted the Liberals.

Under Winfield Scott, a United States expedition then landed at Veracruz, and followed the route of Cortés in a march through Puebla to the capital. Hard fought, vicious battles saved Mexican honor, but Scott was in the end victorious. The United States attack on the Military College at Chapultepec Castle gave Mexican children and the Mexican nation a new set of national heros in the Boy Heroes, the teenage cadets killed in the defense. Santa Anna left the country once more, leaving the problem to a provisional president. Mexico City fell; Taylor swept down through the north and General Kearney through Texas and New Mexico to California, where General Fremont had already taken over. The final peace settlement of the Treaty of Guadalupe Hidalgo ceded to the United States all Mexican territory north and west of the Río Grande in return for US$15 million. Stunned and resentful, with national pride devastated by the loss of nearly half of their territory, Mexicans became more hostile to the United States.

After the war, the ultra-conservatives under Lucas Alemán seized power and recalled Santa Anna from exile to provide authoritarian rule in preparation for plans to place a royal prince at the head of the Mexican government. Assuming an almost monarchical role under the title of Serene Highness, Santa Anna spent lavish sums on trappings and bribery. Lacking ready funds, he finally sold what came to be called the Gadsden Purchase to the United States for US$10 million. The Liberals, growing bolder, articulated their renewed hopes in the Plan of Ayutla in early 1854. The runaway economic, political, and social degeneracy of the country finally and irrevocably undermined Santa Anna's power. In August 1855 he fled.

La Reforma

The Plan of Ayutla, proclaimed by the aging guerrilla Juan Álvarez, was the opening of *la Reforma* in Mexico, that period of the 19th century dominated by liberal thinkers with great faith in the power of words. In November 1855 Álvarez, a *mestizo* liberal constitutionalist, became provisional president. His Indian minister of justice, Benito Juárez, immediately promulgated a law making civil equality basic to the Mexican system by abolishing special privileges and raising the civil courts above those of the the Church, the army, and the great landowners. The bitter opposition of the Church and the conservatives created such popular uproar that Álvarez retired.

Álvarez was replaced by a lawyer, Ignacio Comonfort, a moderate whose cabinet nonetheless unexpectedly adopted anti-clerical laws. Comonfort's minister of finance, Miguel Lerdo de Tejada, in 1856 authored a decree calling for the forced sale of corporate land holdings. While chiefly aimed at the Church, which still controlled a third of the cultivated land in Mexico, the law's phraseology also permitted the redistribution of the communal holdings of the Indians. The plan was to auction off the properties in the anticipation of creating a peasantry of small, free farmers and thus to finance the government by means of a transfer tax in a way no previous Mexican administration had been able to do. It was not the landless who obtained these properties, however, but the speculators, the great landowners, and the local political bosses.

The work of a constituent assembly made up of moderates and liberals culminated in the Constitution of 1857, an affront to the Conservatives, which survived in form, if not in practice, until 1917. Aside from incorporating the anti-clerical and anti-aristocratic ideals of Juárez and Lerdo de Tejada, the chief purpose of the document was to prevent a presidential dictatorship of the sort typical of the Santa Anna period—an objective which within 20 years was to fail at the hands of Porfirio Díaz.

The strong liberal faith in the power of words was reflected in a long list of inalienable rights and in the design of a federal system imbued with more central power—this in a country whose local political bosses increasingly controlled effective political action. The constitutional signing represented a call to arms for the Conservatives. Pope Pius IX issued an extraordinary condemnation of the Constitution, and the Church hierarchy promised denial of the sacraments to all who upheld the works of *la Reforma.* Nearly all important figures in the government were excommunicated. In December 1857, a group of Conservatives under General Félix Zuloaga seized both President Comonfort and the new Vice President and Chief Justice, Benito Juárez. Escaping to Querétaro, a group of congressmen and members of the Liberal administration set up a rump government.

The tensions exploded in January 1858 into a bloody 3-year civil war, the so-called War of the *Reforma.* Juárez, released and at the head of the Liberal regime, set up a government of the Republic of Veracruz, which only the United States among the more influential world powers recognized. This civil war pitted traditionalists against reformers, central Mexico against the provinces, and even Europeans against the United States. During the height of the battle in July 1859, Juárez issued the Laws of the Reform which confiscated all church properties except for buildings used for worship; suppressed all religious orders; ended tithing; required civil marriages and registration of births and deaths (thus depriving the Church of an important source of fee funds); completely separated Church and State; and even restricted any reinstatement of the traditional state Catholicism in favor of the principle of religious equality.

These laws were carried out wherever the Liberals occupied territory, and the consequence was persecution and counter-persecution in the name of Catholicism. For nearly 3 years the Conservative forces under Miguel Miramón held the upper hand. But by controlling Veracruz, Mexico's major seaport—to which the United States kept the sea lanes open—the Liberals maintained an advantage which was to prove decisive. Juárez entered Mexico City in January 1861.

As president, however, Juárez was faced with innumerable problems. There was neither enough money in circulation to gather taxes nor enough sales of Church property to produce a significant amount of hard currencies. The old claims of foreign debt were revived, for the Europeans despised Juárez as an Indian bandit who had robbed and looted Europeans during the civil war. The European demands were intensified by the intrigue of conservative exiles all over Europe; the United States had become immobilized by its own Civil War. At first, Juárez attempted to scale down the debt demands, but encountering only stubborn protests, he stopped payment completely for 2 years. The incensed creditors demanded that the governments of Great Britain, France, and Spain take action.

In late 1861 and early 1862, the Spanish, British, and French governments sent expeditionary forces to Veracruz, either to collect the debt through impounding customs receipts or to frighten Juárez into repayment. The British and Spanish, after lengthy negotiations, withdrew in April 1862. But the French had been approached by Mexican royalists; Napoleon II, coveting the wealth of Mexico and aspiring to leadership of the Latin world, decided to establish a puppet monarchy in Mexico.

The French army, moving inland from Veracruz, was badly beaten at Puebla on May 5, 1862 (see ch. 17, Political Values and Attitudes). Sending a new commander and massive reinforcements, Napoleon redoubled his efforts, finally forcing the Juárez government out of Mexico City in June 1863 and establishing a puppet provisional regime. Settling on the Archduke Maximilian of Austria, brother of the Hapsburg emperor, Franz Josef, Napoleon persuaded the archduke to ascend the Mexican throne by showing him false evidence of overwhelming popular support from a rigged plebiscite. Maximilian arrived at Veracruz in July 1864. Falling in love with the country, Maximilian and his wife adopted Mexican clothes and Mexican customs. Well-meaning Maximilian attempted to make Mexico a showplace of progress and tolerance, but he was overcome by the country's chronic lack of capital, made worse by the French seizure of funds, mines, lands, and business houses in collection of its claims. Too, he enraged the Church by refusing to restore the lands and privileges of the clergy and by appointing Mexican moderates and liberals to high office.

With the end of the United States Civil War, Secretary of State William Seward put heavy diplomatic pressure on Napoleon to withdraw French troops from Mexico, backing his demands by shipping great quantities of surplus war supplies and large numbers of "volunteers" to the Mexican republicans, who were cornered at a spot across from El Paso, Texas, now the site of Ciudad Juárez. Alarmed by the rising power of Prussia, Napoleon was forced to withdraw French troops in January 1867. Deserted but refusing to admit defeat, Maximilian was surrounded at Querétaro by Juárez's troops. He was tried and executed—one of perhaps 50,000 deaths attributable to Napoleon's adventure. Today, Maximilian is generally viewed as a misguided but well-intentioned man.

Juárez, having won the battle against the forces that threatened the consolidation of the Mexican nation—the Church and the French army—entered Mexico City with his stature immensely enhanced. Having driven out the invaders, he became the personification of Mexican nationhood. Symbolically, for the modern Mexican, the circle of national unity broken by the Conquest was finally closed when a full-blooded Zapotec Indian drove out the last of the foreign powers to attempt domination of Mexico. Thus Benito Juárez has become perhaps the leading Mexican national hero (see ch. 17, Political Values and Attitudes).

Mexico now could ignore its foreign debt and get on with the job of nation building. Juárez, reelected in 1867, tried to implement the Constitution of 1857. Retaining the loyalty of key army units through the person of his Minister of War, Ignacio Mejía, Juárez was able to demobilize two-thirds of the military forces and still prevent provincial anarchy and military challenges to his authority. The economy, however, did not easily revive from the ravages of civil war and intervention. Mineral production remained low, and agricultural yields had seriously fallen off after the transfer of Church lands into private hands. Education suffered as a result of the drastic depletion of clerical teachers, the disbanding of the ecclesiastical orders, and popular resistance to Protestant missionaries.

Juárez was, however, able to inaugurate the era of railroad building by contracting with British firms for the Veracruz-Mexico City line, to promote a school system, and to give Mexico its first period of truly stable government since viceregal times. Reelected to the presidency in 1871, Juárez served only a few months before his death in July 1872. The short period of stability and growth was soon shattered by political and military struggles.

Juárez's successor, Lerdo de Tejada, was confronted with the resurgence of regionalism in Jalisco. Reinforced by Guadalajara's commercial leadership of the Pacific coast of Mexico, the old challenge of Jalisco to central control was reopened when the central government attempted to carve out of it two new states, Colima and Nayarit. Guadalajara, through its port of San Blas, had come to dominate west coast trade with the post-Independence decline of Acapulco. The rise of statehood of Sonora, with its ports of Guaymas, and Colima, with its port of Manzanillo, strengthened opposition to the power of Guadalajara, as did the growth of the port of Mazatlán in the state of Sinaloa.

"Bandit" raids, supported and reinforced by Lerdo de Tejada in his attempts to break away the territory of Nayarit, only served to increase the fears and enmity of Jalisco to Mexico City and the central government. A revolt broke out in Jalisco directed against the President, who was from Veracruz and thus a symbol of the hated Veracruz-Mexico City trade monopoly. It was in part by taking advantage of this uprising that one of Lerdo de Tejada's generals, Porfirio Díaz, in 1876 overthrew the government. The advent of the Díaz regime marked the end of *la Reforma*. Juárez's ideals, while never entirely obscured, were deemphasized during the succeeding decades of the *porfiriato*—the long rule of Porfirio Díaz—only to be resurrected and fulfilled with the Revolution of 1910 and the subsequent evolution of modern Mexico.

THE PORFIRIATO

A *mestizo* with Spanish and Mixtec blood, Porfirio Díaz came from a Oaxaca family of modest circumstances, was a pupil of Juárez's in law school, and was an extremely courageous officer in the ranks of the Liberal Mexican army. Díaz had defied the 1854 plebiscite "rigged" for Santa Anna, had been a major figure in the War of the Reform, and had been instrumental in the defeat of the French army at Puebla on May 5, 1862. Refusing a pardon from Maximilian, he had engineered a daredevil escape in 1865 and then been a key leader in the overthrow of the Hapsburg monarch, being the first to enter Mexico City after the withdrawal of the French army. Díaz's Plan of Tuxtepec which initiated the final overthrow of *la Reforma* in 1876 was ostensibly a model of Liberal thought—denouncing the idea of presidential reelection, calling for effective suffrage, and criticizing the extensive presence of foreign capitalists.

Díaz ruled through an informal political apparatus in which the major state and local leaders depended on Díaz not only for their economic well-being but for their very freedom. Each district and city was ruled by a local boss, whose answerability to the national leader was even greater than it had been under the late colonial system. The The national congress and judiciary were staffed with obedient and loyal clients who did their benefactor's bidding. This political apparatus was sustained by spying and spoils, and backed by an army that maintained internal order and forced subservience.

Military loyalty was retained not only because of the vast respect of officers and enlisted men for Díaz, but also because of Díaz's appointment of men he could dominate, his largesse for those in his favor, and his frequent shifting of commands. Perhaps as dominant, however, was the highly effective and centralized police force, the mainstay of which was the rural police.

Incorporating bandits into the brilliantly uniformed, well-armed, mounted rural police, Díaz not only brought rural crime and banditry under control for the first time, but also created a tool for terrorizing political enemies and troublesome citizens. The whole system was built around the slogan "bread or club"—for those who cooperated "bread;" for those who rebelled, the "club," often the product of the fugitive law, which permitted the shooting on the way to jail of those who "attempted escape." This political apparatus completely controlled the Mexican government from 1876 to 1911. The only ostensible lapse in power was the administration of General Manuel González (1880–1884) in order to fulfill Díaz's original commitment to no immediate reelection.

It would be a mistake to believe that the *porfiriato* was unpopular or not respected—at least until its last years. Even his critics admitted Díaz's skill in assuming in the popular mind the mantle of Juárez. Of particular importance in sustaining popular regard was the regime's ability to create and maintain a high level of material and economic growth in Mexico. By 1894 Díaz was able to announce the first balanced budget in the history of the Republic. Mexico attracted great sums of foreign money, matched by the growth of governmental concessions to foreign enterprise.

First railroads, then telegraph and the telephone, brought in large amounts of foreign capital. There followed the reemergence of the mining industry, which in turn stimulated more railroad construction, opening up regions which had become stagnant since Independence. The growth in these latter regions spurred the expansion of the livestock and agricultural industries to the north. The growing national wealth created urban demands for street railways, electrical systems, and massive public utility projects. Finally came the discovery in 1900 of the rich oil pools of the Gulf Coast, stretching from Texas to Veracruz and centering on the port of Tampico. This resulted in the rapid growth of the city of Monterrey, opening up a new and serious regional challenge to the central monopoly of Mexico City and Veracruz (see ch. 2, Physical Environment).

The pattern of growth, despite prosperity, tended to nourish an ever-ripening xenophobia. The foreigner was protected from the police and law courts, and government censorship and tax structure worked to his advantage. Between 1902 and 1911, for example, United States holdings in Mexican railways approximately doubled to almost US$650 million. Total United States investment in Mexico by 1912 was more than US$1 billion—exceeding the total amount of capital invested by the Mexicans themselves.

Labor and even the Church shared in this growing displeasure with foreign "colonization." Knowing that Mexicans as a whole were neither anti-Catholic nor anti-clerical, Díaz had allowed the Laws of the Reform regarding the Church to fall into disuse. As a result, the Church began to regain some of its properties and accumulate moderate cash reserves. But even the native clergy had its complaint. For, while the number of priests rose from 3,000 to 6,000 during his time of office, most of this increase was accounted for by a heavy immigration of Spanish, French, and Italian clerics; while this growth tended to please the Church hierarchy it tended as much to arouse the resentment of the lower ranks of the native-born Mexican clergy.

Díaz had little sympathy for labor, and union organizers were viewed as public enemies and treated severely. As material progress spread, the industrial working class grew; as it expanded, its grievances against government and industry swelled. As early as the 1890's Ricardo Flores Magón, an anarcho-syndicalist, began to attack the Díaz regime with demands for economic equality for Mexican workers. In all, some 250 strikes occurred under the Díaz regime, mainly in the textile, railroad, and cigar industries, all largely in the hands of foreign capitalists. The strikes were put down quickly and ruthlessly, which created a strongly anti-Díaz and anti-foreign attitude among Mexican working classes.

Perhaps the greatest indictment leveled against the *profiriato*, however, was that of the outraged Liberals against the regime's flavor of white supremacy. The notion of white racial superiority was an outgrowth of quasi-scientific notions introduced into Mexico at the end of *la Reforma*. These ideas, however, were not in the long term a practical position for the controlling groups. During the 19th century they had become a progressively smaller proportion of the total population. The mixing of the Mexican population, while gradual, was irreversible.

The 19th-century liberal based his formula for rapid agricultural development on small private holdings, not on the corporate holdings of the Church or the Indian communal holdings. Díaz continued this policy by applying the anti-corporate provisions of *Reforma* laws to the Indian communal holdings. As before, however, the lands did not become small private farms, but were quickly bought up by moneyed Mexicans or foreigners. The result was that foreigners were able to gain control of very large areas. Thus, while more than two-thirds of the population remained engaged in agriculture, production declined, and increasingly toward the end of the *porfiriato* the country required importation of foodstuffs.

Just as the white-to-nonwhite ratio tended to work against the maintenance of a white supremacist philosophy so the landholder-to-peasant ratio worked against the economic philosophy of depending upon the large agricultural landholding. In fact, both weaknesses tended to work hand-in-hand to undermine the *porfiriato*. Some 80 percent of the Mexican population in 1910 was rural and dependent upon the land for subsistence. Yet, over 95 percent of this rural population was landless and depended almost entirely on the few thousand large landowners for their livelihood. The peasant had to buy necessities from his estate's store. As a result, virtually all peasants were in perpetual debt, a debt peonage that would seemingly never allow them to break free. Should they strike or riot in protest, the army and the rural police were ready to supress them.

After the turn of the century protest rose sharply, but the end of the regime was triggered by Díaz himself and a United States magazine correspondent. Díaz had turned 70 in 1900 and concern grew about the problem of a successor. In the 1904 election, Díaz installed a vice president as a concession to those who thought he was too old to guide the country. In February 1908, James Creelman, a reporter for Pearson's Magazine, implied in an article that in a private interview Díaz had expressed a desire to retire in 1910 at the end of his term and that under no circumstances would he run again for reelection. The reprinting of what has come to be known as the "Creelman Report" in the Mexico City newspaper *El Imparcial* stirred political activity as opponents and friends alike began to group their forces for the coming election. Díaz some months later informed his cabinet he would indeed seek another term. However, this interchange caused Francisco I. Madero in 1908 to write *The Presidential Succession in 1910*, a highly popular book that was to prove the undoing of the *porfiriato* and the making of Madero. Encouraged by his own growing popularity and disillusioned by a personal interview with Díaz, Madero declared himself a candidate for the presidency under the slogan "effective suffrage—no reelection."

Díaz had Madero jailed in San Luis Potosí and then carried the election off on schedule—it being announced that Madero had received 196 votes to Díaz's million votes. Released in October 1910, Madero fled to the United States, where he issued the so-called Plan of San Luis Potosí calling for the overthrow of the *porfiriato* and its replacement by a political system providing for no reelection of the president, land reform, and social justice. The Plan caused rumblings among the leaders of the Indian and *mestizo* masses of the north and south; to combat these, Díaz—80 by then—had to depend upon governors and generals who were almost as old as he. Their reaction was too slow and the end came within 6 months in May 1911. Emiliano Zapata, with his army of landless Indian peasants from Morelos and Guerrero, marching under the banner of land and Liberty, captured the important railway center at Cuautla. Pancho Villa and his private army and irregular bandit forces stormed Ciudad Juárez. News of these rebellions brought on army mutinies and riots in Mexico City. Díaz resigned on May 25, 1911, and set sail for Europe.

THE REVOLUTION

Francisco Madero, from an aristocratic Coahuila family of wealthy Díaz supporters, entered Mexico City on June 7, 1911. The masses hailed him as a deliverer who would provide them with "Land and Liberty." The popular euphoria was, however, ill-founded, for it swirled around a man with little experience in public affairs and none in government. His political plans went little beyond free and open elections and the establishment of a democratic system, but the desire for social change had loosed swelling demands, from all sides, that went far beyond this. Although Madero was elected president on November 6, 1911, and subsequently swept away much of the old Díaz bureaucracy, he also attempted a balancing of all actions and thus moved too slowly for the taste of those who wanted to remake the social order overnight.

Generals, local chiefs, and radicals all over Mexico, freed from restrictive controls, responded to the welling up of popular resentment against the controlling aristocracy, both foreign and domestic. Zapata had been leading his peasant army over the Morelos countryside, killing landowners and dividing up their lands. He feared a reaction might cheat the peons of these properties. So in November 1911 he issued his Plan of Ayala, denouncing Madero as having joined forces with the followers of Díaz and thus being unfit to govern. There soon came a southern Indian revolt against Madero's administration. When Madero continued to take no positive steps toward social reforms, Pascual Orozco and his Army of the North revolted in March 1912. Although the Orozco revolt was put down by General Victoriano Huerta, the social ferment raging among the lower classes of the north, particularly in the state of Chihuahua, was not effectively countered. It soon became clear that although Madero put political reform above social and economic reform, the latter held highest priority for the revolutionary elements epitomized by Zapata and Orozco.

Madero could not reestablish order. His inevitable downfall came at the hands of three nonrevolutionaries: Huerta; General Félix Díaz, nephew of the recently deposed autocrat; and Henry Lane Wilson, the United States Ambassador to Mexico. Díaz had unsuccessfully attacked the presidential palace. Rebuffed, he joined Huerta, whom Madero had appointed to lead the forces loyal to him. Together on February 9, 1913, they began a siege of Mexico City which lasted for 10 days (the "tragic ten"). Ambassador Wilson stepped in to mediate between Madero and Huerta, hoping to achieve peace, to provide safety for American citizens, and to reestablish the flourishing United

States enterprises that had prevailed during the *porfiriato.* Wilson pressured Madero to resign and encouraged a Huerta coup by informing the general's representatives that the United States would recognize any regime that could restore order to the city and countryside. On February 18, Huerta arrested Madero and proclaimed his own assumption of the presidency until elections could be held.

Despite promises of safe passage out of Mexico, Madero was assassinated on the night of February 22 as he was being removed from the presidential palace. While no evidence linked Wilson to the plot, to many Mexicans it appears that he bore responsibility, in that the coup he encouraged led to the murder. This and other grievances induced violent hostility to the United States among the Mexican revolutionaries. Madero's assassination raised the stature of this unsuccessful president to that of a martyred Father of the Revolution.

Huerta ruled by force, bribery, and a liberal construction of the fugitive law. His claim of a lack of popular demand for new elections in October 1913 caused Zapata to break away and the surviving followers of Díaz to denounce his dictatorship. Having escaped prison to reenter Mexico from the United States, Pancho Villa, constantly eluding the grasp of Huerta's military, broadened his power base in Chihuahua. But Huerta's most serious problem was American President Woodrow Wilson.

By April 1914, Wilson had lifted the United States embargo on arms to Mexico. This aided the rebel armies of Villa and of Alvaro Obregón in Chihuahua and Sonora; they gained control of virtually the entire northern border zone, and with the aid of Zapata, the central states of Morelos, Guerrero, and Michoacán and parts of the regions to the north and east of Mexico City. All of these were under the general leadership of Venustiano Carranza. In the face of this threat, Huerta's strategy was to maintain fortified cities along the rail lines from the United States border to Mexico City. But during late 1913 and early 1914, the *constitucionalistas*, as the forces of Villa, Obregón, and Carranza came to be called, descended out of the north following those same rail lines.

The fatal blow to Huerta's cause, however, came from President Wilson's strong reaction to the arrest of some United States sailors in Tampico; Wilson ordered United States naval forces to seize and hold the customs house at Veracruz and so bring on the financial collapse of the Huerta government. In an attempt to deprive Huerta of a shipment of arms in Veracruz, a party of United States marines and sailors was landed, only to be forced to withdraw by a group of citizens led by two hundred cadets from the Mexican Naval Academy. The next day three United States cruisers bombarded the Veracruz defenses into submission.

These acts generated indignation among some Mexicans, but Huerta was unable to turn the inflamed Mexican nationalism into support. Surrounded and without financial resources he resigned in July 1914 and fled to the United States. This triggered an interlude of anarchy. As the revolutionary forces approached the capital, a wave of violence broke out. Wealth became punishable by death. Estates, factories, villages, and mines were ravaged.

Obregón's army of the northwest reached Mexico City first, followed by Carranza, who had by this time broken with Pancho Villa. In an attempt to unify the movement, the leading factions under Villa, Zapata, Obregón, and Carranza met in October 1914 in Aguascalientes to organize a government satisfactory to all. The presidential choice of Villa and Zapata, Eulalio Gutiérrez, was elected, causing Carranza and Obregón to repudiate the proceedings and to withdraw to Veracruz where they set up a regime "in exile" and began building a military force to oust Villa and Zapata.

President Gutiérrez soon gave up his position and went over to the Carranza-Obregón side. Zapata and his followers returned to their southern homeland. In February 1915, joined by a sizable force of radical laborers, Obregón drove Villa from Mexico City and gave chase until a final battle at Celaya in April broke the back of the Villa forces.

In a desperate attempt to wrest control of the Revolution from Carranza, Villa attempted to provoke a general United States invasion by a series of border raids. President Wilson sent General John Pershing with a large force of United States regulars and militia into Chihuahua to chase Villa. While Carranza strongly objected to the United States chase of Villa's "bandits," there was little he could do to control Villa, let alone Pershing.

The withdrawal of United States troops in February 1917 came almost simultaneously with the publication by the British secret service of the so-called "Zimmerman note," in which Germany offered Mexico an alliance against the United States (anticipating American entrance into World War I) in return for territory lost by the Mexican Cession of 1848. The offer was not accepted, but the resulting outcry in the United States and the galvanizing of Mexican nationalistic antipathy to the United States proved an asset to Carranza.

The Carranza government convened a constitutional convention in Querétaro in late November 1916, in an attempt to attract peasant and worker support and to restore legality to political affairs. Within little more than 2 months Carranza proclaimed the completion and ratification of the Constitution of 1917, the most hallowed document of the Mexican Revolution. The provisions of the new constitution incorporated political elements prevalent in most 19th-century Western constitutions—effective universal male suffrage, no reelection of the president, division of powers, a weak bicameral legislature, an independent judiciary, separation of Church and State, federalism, and free compulsory education.

On matters of economic and social welfare, however, the revolutionary intellectuals had their way, incorporating the collectivist principle in the Constitution to a degree unparalleled before the Russian Revolution. The state was to take precedence over the individual. The pre-colonial communal farmlands of the central and southern Indian villages were to be restored and enlarged. "Oversized" individual holdings were to be subdivided. The Constitution of 1917 guaranteed the right of agricultural and industrial workers to unionize and strike, and proclaimed limits to working hours and bases for minimum wages. Both debt peonage and child labor were forever abolished. The Church was to own no property whatsoever, including houses of worship. Monastic orders were outlawed, and priests were severely restricted. Most of all, the Church was to have nothing to do with public education.

Once in the presidency, Carranza governed under a conservative interpretation of the Constitution. Bothered by the persistence of Zapata-led revolts demanding "Land and Liberty," Carranza tried persistently to capture the peasant leader; his subsequent involvement in the assassination of Zapata undermined his popular support, and his attempt in 1920 to dictate his successor completed public disaffection, even to the extent of causing Obregón to summon the people, through his Plan of Agua Prieta, to resist the imposition of the successor. Carranza attempted to get to Veracruz in a train loaded with the national treasure, only to have the train derailed and to be hunted down and murdered. Not long after, on July 20, 1923, Pancho Villa was ambushed inParral by a relative of one of the victims of his banditry. By 1923, Madero, Zapata, Carranza, and Villa, four of the five great heroes of the Mexican Revolution, were dead. The last, Obregón, would soon follow.

THE RISE OF THE MESTIZO SPIRIT

By 1920 many were beginning to feel that once again the Mexican Revolution was falling back into reaction. It seemed as if the revolutionary promises and ideals were going to be lost in the violence and confusion that prevailed. But Álvaro Obregón assumed the presidency, salvaging the Revolution and consolidating its divergent forces. He established the so-called Sonoran Dynasty that was to rule Mexico for the next 15 years. With him began the tradition of pragmatic rule, rejecting imported or domestic radicalism, while at the same time heading off the landowners, the clergy, the would-be aristocrats, or the foreigners who might try to deflect the system from revolutionary objectives.

It was through his manipulation of the three new bases of power—the revolutionary generals, the agrarian spokesmen, and the labor leaders—that Obregón solidified the program of the Revolution. Obregón reduced the size of the armed forces drastically while inducing many generals to accept status as a pensioned class of wealthy individuals. Most of the generals responded by remaining strongly loyal to Obregón and the new system throughout their lifetimes.

It was a good deal more difficult to organize and bring under control the agrarian elements. Being a northerner, Obregón saw land reform primarily in terms of small private plots, but he allowed an old Zapata follower, Antonio Díaz Soto y Gama, to influence his policies to the extent that some 4 million acres of land were redistributed, mostly in the form of common lands to Indian communities.

It was in labor matters that Obregón was to achieve his greatest national acclaim. He supported Luis Morones in 1918 in his attempts to establish a national trade union confederation, the Regional Confederation of Mexican Labor (Confederación Regional Obrera Mexicana—CROM). Under Obregón. Morones and the CROM had the full and enthusiastic support of the government in forcing hesitant workers into unions and in backing union claims against entrepreneurs.

It was under Obregón that Mexico's vast attempt at mass education of the illiterate really began (see ch. 9, Education). His minister of education, José Vasconcelos, was a writer and philosopher of high repute; his conception of the racial superiority of the Mexican intermixture of Mongoloid, Negroid, and Caucasoid blood was to take on a very special importance in the attempt to create a *mestizo* society and a sense of national greatness. In this process, the search for national identity seized upon the glorification of the Indian past. This was a period of unprecedented intellectual freedom and artistic flowering which brought forth the great muralists Rivera, Orozco, and Siqueiros; the composers Carlos Chávez and Manuel Ponce; the philosophers Alfonso Reyes and Antonio Caso; and a wealth of poets and novelists—all of whom glorified the Indian past (see ch. 10, Artistic and Intellectual Expression).

The principal instrument of creating a *mestizo* society was public education. Thousands of new schools were started and staffed with hastily trained primary teachers. Obregón had infused with missionary zeal the attempt to establish a fully literate Mexican society. Vast numbers of itinerant teachers moved out over the countryside; cultural missions brought hygiene to remote villages; and children were taught the folk arts and dances of ancient Mexico (see ch. 9, Education). Moreover, Obregón, in his agricultural program, stimulated the education of farmers in modern methods and techniques.

With the aid of United States arms and permission to pass through Texas in a flanking maneuver, Obregón was able to put down a revolt and to ensure the 1924 presidential installation of his friend and fellow Sonoran, Plutarco Elías Calles (president 1924–28). Calles pursued essentially the same policies as did Obregón, but perhaps with even more vigor. Agrarian reform gained more momentum, as more than 20 million acres of land were redistributed to the Indian communities over the decade in which Calles directly controlled government policy. The school building program moved ahead rapidly. The movement attracted increasing numbers of workers and Calles continued to support the CROM.

It was with regard to the Church, however, that Calles was to demonstrate what many considered to be true "revolutionary virtue." In 1926, he suddenly ordered complete and strict compliance with the various anti-clerical clauses of the Constitution of 1917, particularly those requiring the registration of all priests and the closing of seminaries. The government hunted down clandestine communities of friars and nuns and confiscated Church property, funds, and art objects. Parochial schools were shut and the teaching of atheism in the public schools was encouraged.

On July 31, 1926, all church bells were silenced and for the next 3 years no church services were held in Mexico, although the church buildings remained open for individual worship. Devout citizens, mainly centered in Jalisco and Guanajuato, rebelled against the "godless republic," often assassinating officials and beating revolutionary leaders. By 1929, both sides had had enough. The conflict was temporarily compromised through the mediation of United States Ambassador Dwight Morrow. The federal government, did not, however, stop the governors of such states as Sonora, Tabasco, Veracruz, and Yucatán from expelling or deporting most of the priests in their domains.

During the first 2 or 3 years of his presidential term, Calles brought the monetary and fiscal system of Mexico directly under the control of the state, establishing the Bank of Mexico in 1925, creating a general controller's office for overseeing national budgetary matters, and levying Mexico's first income tax. For the first time since the Díaz regime, Mexico showed signs of attaining financial and monetary stability (see ch. 25, Banking and Currency). In 1926 Calles created Mexico's first post-revolutionary development bank. He broadened this agrarian program by establishing the National Irrigation Commission, and subjected the electric power industry to strict government regulation. In addition, he attempted to link all parts of the nation through a road network.

In December 1925 Calles ordered all oil companies to exchange their titles of ownership for 50-year leases. The long and acrimonious controversy that ensued was again settled by Ambassador Morrow. After creating a particularly friendly atmosphere between himself and the Mexican government, he was able to achieve an agreement whereby companies which had performed "positive acts" of exploitation before 1917 should not be disturbed, although the state's ownership of the subsoil was reaffirmed in principle.

In the 1928 presidential election, Calles tried to restore his old partner, Álvaro Obregón, to power but before his inauguration Obregón was assassinated by a religious fanatic. All the great heroes of the Revolution's military stage were dead; maintenance of revolutionary spirit and direction could no longer depend on personalities but now needed the institutionalization of the revolutionary process. Therefore, Calles pulled together most of the elements he and Obregón had constructed and created the National Revolutionary Party (Partido Nacional Revolucionario—PNR), officially making Mexico into a one-party state. Calles himself assumed the role of directing the PNR, initiating the process of direct central control over all levels of government, grouping all political parties and regional political associations into a single national entity. The agrarian forces were easily brought into the party, being a still relatively weak political force in Mexico. The army was a different matter. Calles and his loyal generals Cárdenas, Amaro, Cedillo, and Almazán took to the battlefield to defeat dissident generals in the last rebellion of regular army elements against the central government. On the other hand, labor by way of the CROM was left out—largely a product of Calles's feelings about Luis Morones, whom he had come to consider grasping.

The interim presidency of Emilio Portes Gill was followed in 1929 by the election of Pascual Ortíz Rubio to the remainder of the presidential term, which had by this time been extended to 6 years. Hamstrung by a growing power struggle between his own few supporters and those loyal to Calles and his generals, Ortíz Rubio resigned in 1932 and was replaced through Congressional selection by Abelardo Rodríguez, who served out to the end of the term in 1934.

The pressures of the more liberal elements of the PNR were sufficiently strong that Calles found it necessary to select as the presidential nominee Lázaro Cárdenas, whom Calles felt he could control. Cárdenas assumed the presidency in late 1934 with a Calles-approved cabinet. But the new president proved to have strong attitudes of his own—closing gambling casinos and brothels, backing labor in a sudden series of strikes, and announcing a series of far-reaching educational and social reforms without the advice or consent of Calles. Viewing these acts as a challenge to his authority, Calles began to hint that Cárdenas might be forced into a resignation. Cárdenas stood his ground, and on June 19, 1935, dissolved the original cabinet and appointed one committed both to him personally and to his program of economic and social reform. On the same day, a government aircraft flew Calles to Mazatlán and retirement. This ended the Sonoran Dynasty.

The official party brought under its wing the giant national labor organization, the Workers Confederation of Mexico (Confederación de Trabajadores de México—CTM), created out of the ruins of the old CROM by the Marxist intellectual, Vicente Lombardo Toledano. Although the CTM has undergone ups and downs in government favor, it has remained the largest labor group in Mexican commerce and industry.

Cárdenas, a southerner, saw land reform in terms of rejuvenating the ancient Indian communal lands and through his vast land-distribution program created more communal-land farmers than there were workers in the entire industrial labor force. From this he created the agrarian pillar of the restructured party, the National Agricultural Workers Confederation (Confederación Nacional Campesina—CNC), membership in which became obligatory for every communal-land farmer in the nation. Finally, Cárdenas created the Federación de Sindicatos de Trabajadores en el Servicio del Estado, a "civil servants" and teachers' organization, the membership of which was solidly committed to the official party.

Outside the official party proper, interest groups were created among bank employees, small independent farmers, cooperative labor, chambers of commerce. These groups, while not part of the official party, were to be consulted frequently by the president on decisions of great national or particular importance. Essentially, then, the newly reorganized party rested on a functional occupational structure. Overall direction of this party and, therefore, of national affairs was lodged in the hands of the president, advised by a committee made up of the four secretaries heading up the four party sectors. This basic design still characterizes Mexico's "one-party democracy."

Cárdenas has come to symbolize the implementation of the most revolutionary clauses of the Constitution of 1917, yet, in 1936, Cárdenas decided to relax the restrictions against the Church's participation in education. The Ministry of Education had fallen into the hands of Communists; and "socialistic" teachers with their "anti-god" instruction caused a good deal of public rancor, often being forcibly ejected from devout villages. While Cárdenas had no quarrel with the Communists as long as their beliefs and activities coincided with those of Mexican socialism, popular pressure and the growing divergence of vocal Stalinists and Trotskyites caused him to begin a revamping of the Mexican educational system. By 1945 President Manuel Ávila Camacho was able to call for and obtain the passage of a constitutional amendment which called for a patriotic education, a greater tolerance of private and parochial schools, and a revision of textbooks. Religion finally became a matter of course, without the intense passions which had surrounded it for so long.

This relaxing of strong revolutionary anticlerical sentiment was balanced by a strict adherence to revolutionary land-reform objectives. By 1940 Cárdenas had redistributed nearly 45 million acres as communal lands. While nearly three times as much land remained in private hands, predominantly in large estates or in commercial farms, the area held communally included almost half of the land actually under cultivation. More than 40 percent of the agricultural population worked common holdings. In social terms, the effect of the Cárdenas program was to make the rural peasant, particularly the southern Indian, feel that the federal government had his interests in mind (see ch. 19, Agriculture).

Lázaro Cárdenas, a Tarascan Indian and revolutionary fighter, has become a living legend among the poor of Mexico and the Left. He brought the masses into the political structure by revamping the official party, renaming the modernized power structure the Party of the Mexican Revolution (Partido de la Revolución Mexicana—PRM). The object was to create a set of interest groups through which the PRM might become more responsive to popular demands—although the final word would continue to be that spoken by the president of the republic. The aim of Cárdenas was to achieve a functional democracy, centered on a single party and giving primary voice to the labor, agrarian, military, and "popular" sectors, but also incorporating other broadly based national interest groups.

Cárdenas backed the labor movement strongly. A case in point was the nationalization of the railway system. He placed management in the hands of the railroad workers' union. Inefficiency, featherbedding, and costs mounted drastically, as did the accident rate. This interlude proved so unworkable that Cárdenas finally brought the railroads under the direct control of an autonomous government agency.

But Cardenas' most famous implementation of his program of "national socialism" was the strict enforcement of states' constitutionally decreed subsoil rights. A protracted dispute between American and British oil companies and the CTM—whose members in the petroleum industry were striking for higher wages, fringe benefits, and better living and working conditions—brought government pressure on the companies to submit to labor's demands. The companies refused a court settlement, and appealed the decision over the head of Cárdenas through full-page advertisements in Mexican newspapers. Cárdenas, using Article 27 of the Constitution of 1917, announced the expropriation of the foreign oil properties in 1938. (Indemnification of US$24 million was eventually agreed to in 1941.) The nationalized oil fields and refineries became a government monopoly known as PEMEX (Petróleos Mexicanos). This act was to make Cárdenas a national hero, a symbol of Mexico's break with foreign domination.

Little has changed in the formal political framework since Cárdenas, with the exception of the enfranchisement of women by Adolfo Ruiz Cortines in 1954, and the dropping of the military as such from the party structure in conjunction with the institutionalization of the popular sector by Manuel Ávila Camacho (see ch. 14, Political Dynamics). Following this latter structural change, the PRM in 1946 changed its name to its present title, the Institutional Revolutionary Party (Partido Revolucionario Institucional—PRI)—a verbalization of the institutionalization of an ongoing, peaceful Mexican Revolution.

Thus succeeding governments have modified and even moderated the institutions of the Revolution solidified by the Cárdenas administration, but the basic system has changed little since. Under the system the president is nominated by the heads of the party and the outgoing president after consultation with sector leaders, strong interests outside the party, and other individuals powerful in their own right. Since Cárdenas there have been five presidents: Manuel Ávila Camacho (1940–1946), Miguel Alemán (1946–1952), Adolfo Ruiz Cortines (1952–1958), Adolfo López Mateos (1958–1964), and Gustavo Díaz Ordaz (1964–). These men have been drawn from all factions of PRI, but all, while in office, have tended to behave as "men of the center."

The present pattern, however, has undergone the cumulative effect of forces set in motion by Cárdenas. First, the process of restoring the traditional communal lands has broken the power of the estate owners as a class. These displaced rural elites have moved to the cities where they have become urban real property investors, merchants, or industrialists. This in turn broke the traditional resistance against economic protectionism and permitted the establishment of tariffs and controls aiding domestic industry. Second, the pensioning of the revolutionary generals, and their soldiers, usually with land, has tended both to remove them from the political scene and to give them a stake in the continuance of the PRI system.

However, World War II (in which Mexico was a declared adherent of the Allies), accentuated certain of these effects in ways probably not anticipated by Cárdenas. The acute shortage of manufactured goods available for import during World War II accentuated sharply the upsurge in domestic manufactures already started under Cárdenas. By the end of the war, the United States, a heavy importer of Mexican minerals and fibers, had a negative balance of trade of over US$2 million. Building on this backlog and accumulation of domestic capital reserves, the social and political power of Mexico's industrialists has sharply grown. Within the PRI structure they have typically been centrist. "Their" president was Adolfo Ruiz Cortines who with his

nance Minister Carillo Flores, kept the momentum of Mexico's in-
strial growth going in the 1950's with judicious use of tariffs, quotas,
d legal controls on the amount and character of foreign investment.

The net effect of all this has been a great strengthening of the power
the center in PRI, with concomitant weakening of both Left and
ght.

CHAPTER 4

POPULATION

The 1930's saw the beginning of a sharply rising population growth ate, which has culminated in the 1960's in an annual growth rate of bout 3.5 percent—one of the highest in the world. While this growth s evident in the rural areas of the central region, those with the more ertile and better watered soils, the growth is seen most vividly in he cities, where in recent years it reached more than 5 percent. A art of this urban growth represents Mexico's fast pace of indusrialization, but part, with more attendant difficulties, represents the nflux from the heavily populated farms, particularly from the dry-arming areas which have not enjoyed the economic health of the rrigated regions.

Concurrent with the rise in population growth rate, the death rate as fallen to new lows. Primarily because of disease control and saniation programs, life expectancy has almost doubled in the past few ecades. Infant mortality continues to occupy a leading position in he death figures, but it is falling. The birth rate, however, is falling nly slowly, and the motivation for birth control is not widely in evience, among the people or within the government. The freedom of ovement that has characterized Mexico since the Revolution still xists, although in character it is now primarily internal; internaional migrations have dwindled sharply.

POPULATION STRUCTURE

Size and Composition

The estimated population in 1968 numbered about 47,600,000, if the rowth rate of 3.5 percent which characterized 1967 continued in 1968. he last census in 1960 recorded 34,923,129 inhabitants. Of these 7,507,809 were female and 17,415,320 were male. An estimate for 1967 howed a continuation of the slight preponderance of females in the opulation (22,904,000 out of a total of 45,671,000). In the rural comonent of the population, however, there tend to be more males than emales.

There is substantial variation among estimates of the religious composition of the country. While the percentage of the population belonging to the Roman Catholic faith has apparently been declining over the past three or four decades, it is still far the largest group with 90 percent or more. Protestants form from 2 to 3 percent of the total, with Presbyterians, Methodists, Baptists and Pentacostals being the more active sects. A small Jewish component, about 0.3 percent, is made up primarily of middle-class business men, although there are a number of Jewish Indians as well. Those outside the Judeo-Christian group number several hundred thousand, consisting primarily of Indians in the Yucatán Peninsula and in peripheral population areas (see ch. 11, Religion).

It is usual in Mexico, particularly in the government, to identify Indians by language rather than cultural traits. In the more than 700 tribal groups inhabiting the area at the time of conquest, about 100 languages were spoken. Now, this number has fallen to a little over 50 languages and dialects of which only 10 are used by groups larger than 50,000 people. Mexicano, the language of the Aztecs, is spoken by about 600,000 in the East Central part of the country. Maya is spoken by about 300,000 in Yucatán. Zapotec and Mixtec account for 200,000 and 185,000 respectively, both common in the state of Oaxaca. Otomí is used by about 185,000 people in the eastern part of the Mesa Central, north and northwest of Mexico City, while Totonac is spoken by about 100,000 in northern Veracruz and in Puebla. About two-thirds of the Indians speak Spanish as well (see ch. 5, Ethnic Groups and Languages).

Pure Indians represent a declining percentage of the total over time, since the non-Indian components grow at a faster rate. The percentage of whites also shinks relatively over time, as the whites become absorbed into the *mestizo* group and as the number of white migrants to Mexico drops. The national contributions to the white group, in decreasing order of size are: Spaniards, Americans, Canadians, English, German, and French.

The population is quite youthful (see table 1). In 1960 more than one-half of the population was less than 20 years of age, and over 80 percent was less than 40 years of age. This represents an increase in youthfulness from 1950. At that time, 41.8 percent were under 15 as compared to 44.7 percent in 1960. The growth rate has been increasing since that time, primarily due to a declining death rate—and much of that due to decreasing infant mortality—so that the population in 1968 would be younger than it was at the time of the last census.

Table 1. Population of Mexico, by Age Group, 1960

Age group	Number	Percent of total
ess than 1 year	1, 144, 187	3. 3
1–4 years	4, 632, 560	13. 3
5–9 years	5, 317, 044	15. 3
0–14 years	4, 358, 316	12. 5
5–19 years	3, 535, 265	10. 2
0–24 years	2, 947, 072	8. 5
5–29 years	2, 504, 892	7. 2
0–34 years	2, 051, 635	5. 9
5–39 years	1, 920, 680	5. 5
0–44 years	1, 361, 324	3. 9
5–49 years	1, 233, 608	3. 5
0–54 years	1, 063, 359	3. 1
5–59 years	799, 899	2. 3
0–64 years	744, 710	2. 1
5–69 years	414, 164	1. 2
0–74 years	333, 371	1. 0
5–79 years	187, 773	0. 5
0–84 years	128, 338	0. 4
5 and over	131, 389	0. 4
ndeclared	113, 543	
Total	34, 923, 129	100. 0

ource: Adapted from Union Panamericana, *América en Cifras*, 1968.

Distribution

Of the country's five zones—North Pacific, North, Central, Gulf, and South Pacific—the Central zone is by far the most populous (see table). Of the political subdivisions—29 states, two territories, and the ederal District—the Federal District, seat of the government, has 3.9 percent of the 1960 total population.

Urban dwellers, those living in towns of 2,500 or more inhabitants, lightly outnumbered the rural population in 1960. From 1951 to 1960, he rate of growth of urbanization was about 4.9 percent per year; it as been estimated that this growth rate has increased to a little over percent in the 1960's. Since the rural component has been growing t around 1.5 percent per year, the urban portion is expected to rise o about 63.6 percent of the total by 1975. The estimate is that over 38 illion people will be city dwellers by that time, and rural inhabitants ill number an estimated 22.2 million. These estimate can be compared o urban percentages of 33 percent in 1930, 35 percent in 1940, 43 perent in 1950, and not quite 51 percent in 1960.

Table 2. Population of Zones and States in Mexico, 1960

Zone	State	Population	Percent of total
North Pacific		*2,613,470*	*7.4*
	Baja California, North	520,165	1.5
	Baja California, South	81,594	0.2
	Nayarit	389,929	1.1
	Sinaloa	838,404	2.4
	Sonora	783,378	2.2
North		*6,864,521*	*19.6*
	Coahuila	907,734	2.6
	Chihuahua	1,226,793	3.5
	Durango	760,836	2.2
	Nuevo León	1,078,848	3.1
	San Luis Potosí	1,048,297	3.0
	Tamaulipas	1,024,182	2.9
	Zacatecas	817,831	2.3
Central		*17,099,160*	*48.9*
	Aguascalientes	243,363	0.7
	Federal District	4,870,876	13.9
	Guanajuato	1,735,490	5.0
	Hidalgo	994,598	2.8
	Jalisco	2,443,261	7.0
	México	1,897,851	5.4
	Michoacán	1,851,876	5.3
	Morelos	386,264	1.1
	Puebla	1,973,837	5.7
	Querétaro	355,045	1.0
	Tlaxcala	346,699	1.0
Gulf		*4,056,676*	*11.6*
	Campeche	168,219	0.5
	Quintana Roo	50,169	0.1
	Tabasco	496,340	1.4
	Veracruz	2,727,899	7.8
	Yucatán	614,049	1.8
South Pacific		*4,289,302*	*12.3*
	Colima	164,450	0.5
	Chiapas	1,210,870	3.5
	Guerrero	1,186,716	3.4
	Oaxaca	1,727,266	4.9
	Total	34,923,129	100.0

Source: Adapted from Union Panamericana, *América En Cifras*. Washington, D.C.; OAS, 1968.

In 1960, Mexico had 17 cities with over 100,000 population (see table 3). In mid-1965 Mexico City was estimated to have 3,192,804 inhabitants. The next largest city is Guadalajara with a 1965 estimated population of 737,000, or about one-fourth the size of the largest. This phenomenon was apparent in colonial times, where the center of govrnment attracted a great many inhabitants because of the high social restige attached to living in the capital.

Table 3. Population of Principal Cities in Mexico, 1960

City	State	Population (in thousands)
lexico City	Federal District	2, 832
uadalajara	Jalisco	737
onterrey	Nuevo León	597
uebla de Zaragoza	Puebla	289
uárez	Chihuahua	262
eón	Guanajuato	210
orreón	Coahuila	180
Mexicali	Baja California	175
érida	Yucatán	171
an Luis Potosí	San Luis Potosí	160
ijuana	Baja California	152
hihuahua	Chihuahua	150
eracruz	Veracruz	145
guascalientes	Aguascalientes	127
ampico	Tamaulipas	123
illa de Guadalupe Hidalgo	Federal District	103
Morelia	Michoacán	101
altillo	Coahuila	99
ictoria	Durango	97
ermosillo	Sonora	96
uevo Laredo	Tamaulipas	93
Matamoros	Tamaulipas	92
uliacán	Sinaloa	85
rapuato	Guanajuato	84

ource: Adapted from Union Panamericana, *América En Cifras 1967*, Washington, D.C.: OAS, 1968.

In 1968 there were an estimated 47,600,000 people on a little over 60,000 square miles of land area. The overall density is close to 62 ersons per square mile, but there are sharp variations in relative ensity throughout the country (see fig. 11). Almost one-half of the opulation is concentrated in the central part of the country, with ariations at the state level of from 50 to over 200 persons per square mile and with local variations extending to over 1,000 per square mile. The basin and rims of the Mesa Central have been areas of high population density since precolonial times. The attractions of the capital nd of fertile soil and available water for irrigation have brought a opulation density that produces severe social and economic difficulties (see ch. 8, Living Conditions).

The southern states are considerably less densely populated, with a ariation from five to 10 people per square mile in the Yucatán Penin-

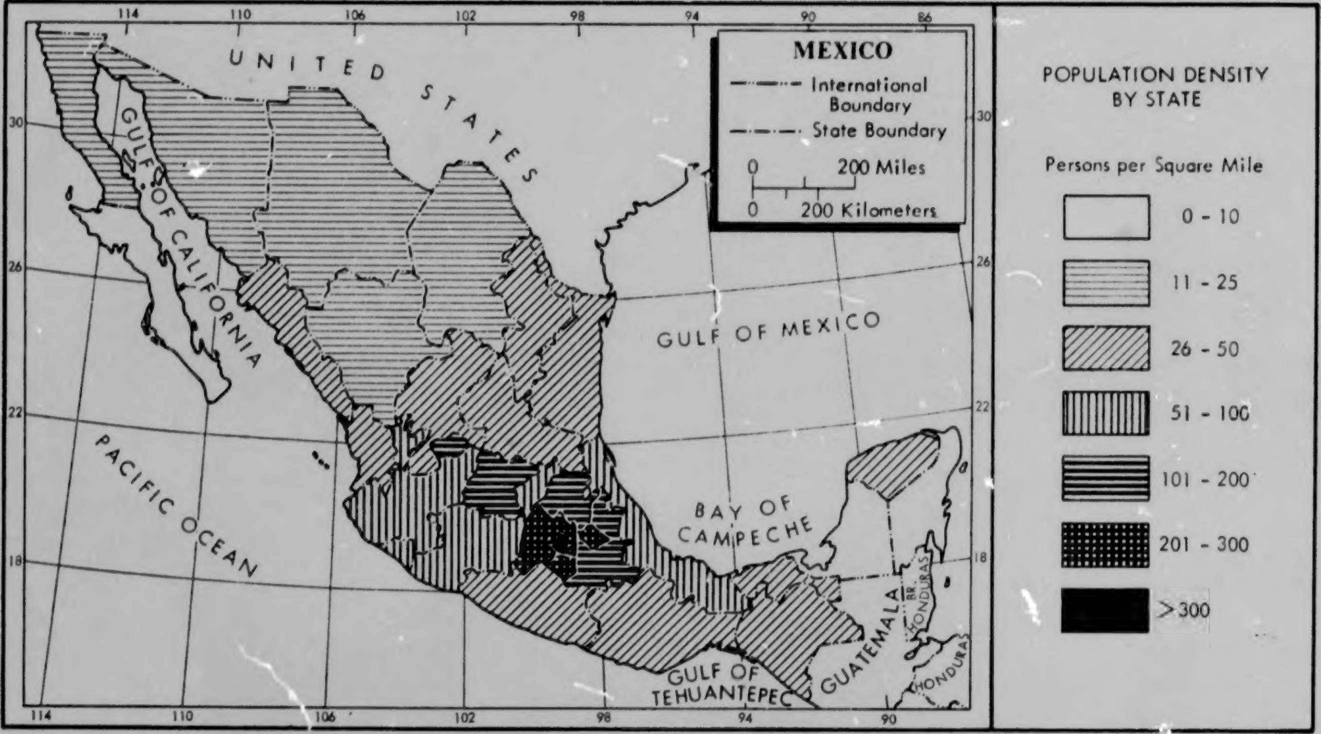
MEXICO
International Boundary
State Boundary
0 200 Miles
0 200 Kilometers
POPULATION DENSITY BY STATE
Persons per Square Mile
0 - 10
11 - 25
26 - 50
51 - 100
101 - 200
201 - 300
>300
UNITED STATES
GULF OF CALIFORNIA
GULF OF MEXICO
BAY OF CAMPECHE
PACIFIC OCEAN
GULF OF TEHUANTEPEC
GUATEMALA
BR. HONDURAS
HONDURAS
114
110
106
102
98
94
90
86
30
26
22
18

Figure 11. Population density of Mexico.

ula to close to 50 people per square mile in the southern states of Guerrero, Oaxaca, and Chiapas. Here again there are local variations from virtually uninhabited mountain areas to over 100 persons per square mile in some of the highland valleys. The arid states of northern Mexico have generally sparse populations of up to 25 persons per square mile, although migrations from the Mesa Central encouraged by industrial opportunities and new farmlands opening up in the north are producing local densities of 100 persons per square mile and more.

Another dimension of population distribution is that at the housing evel. In 1960 there were 355,000 one-person homes, 1,630,000 two-person homes, 6,404,000 homes accommodating three and four people, 18,484,000 homes housing five to eight people, and 8,050,000 housing nine or more individuals. Since the construction of housing has not been able to keep the pace of urbanization, it is highly likely that the ratio of people to available housing units will show more crowding in 1968.

POPULATION DYNAMICS

Growth Trends

From the colonial period to the latter part of the 19th century, the pace of population growth was quite moderate, generally less than 1 percent per year (see fig. 12). With the stability of the Díaz regime,

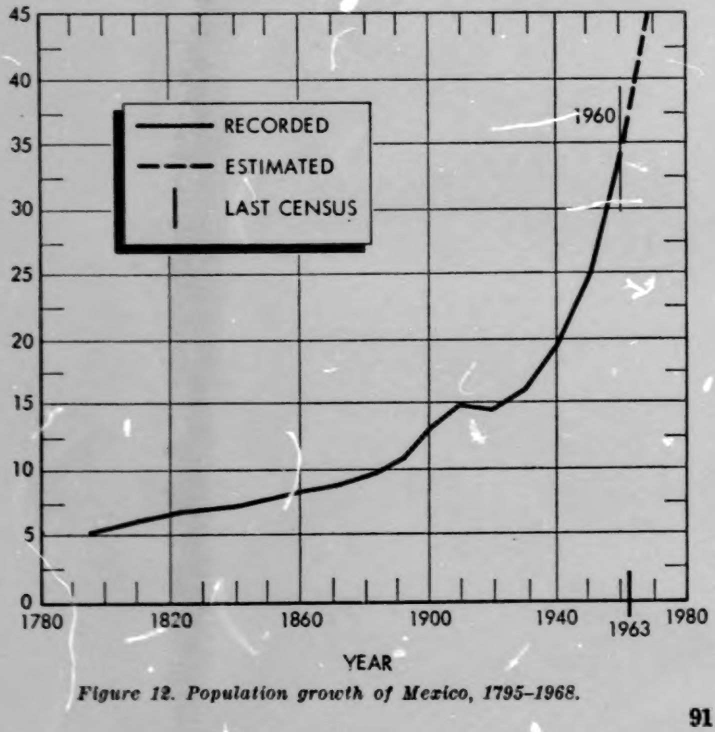

Figure 12. Population growth of Mexico, 1795–1968.

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growth quickened markedly, only to be slowed and for a time reversed during the Revolution. Starting in the 1930's, the rate of growth began to increase, culminating in today's approximate 3.5 percent per year growth rate.

The population as a whole increased by about 35.4 percent between the census years of 1950 and 1960 (see table 4). A number of states exceeded the national average. The Federal District grew by almost 60 percent, reflecting both the continuing significance of the Capital and the general rapid growth of urbanization. Baja California, North, with industrial growth and agricultural improvements, had a population increase of nearly 130 percent. In general, the southern states grew much less rapidly than the northern ones, and the states of the central region tended to grow at a rate near to that of the national average. The major cities grew rapidly. From 1960 to 1965 Mexico City grew from 2,832,000 to 3,192,000; Guadalajara, the second largest, grew from about 737,000 to 1,048,000.

Table 4. Intercensal Population Growth in Mexico, 1950–1960

	1960 Census	1950 Census	Percent increase (1950 to 1960)
Population Total	34, 923, 129	25, 791, 017	+35. 4
Federal District	4, 870, 876	3, 050, 442	+59. 7
Aguascalientes	243, 363	188, 075	+29. 4
Baja California, North	520, 165	226, 965	+129. 2
Baja California, South	81, 594	60, 864	+34. 1
Campeche	168, 219	122, 098	+37. 8
Coahuila	907, 734	720, 619	+26. 0
Colima	164, 450	112, 321	+46. 4
Chiapas	1, 210, 870	907, 026	+35. 5
Chihuahua	1, 226, 793	846, 414	+44. 9
Durango	760, 836	629, 874	+20. 8
Guanajuato	1, 735, 490	1, 328, 712	+30. 6
Guerrero	1, 186, 716	919, 386	+29. 1
Hidalgo	994, 598	850, 394	+17. 0
Jalisco	2, 443, 261	1, 746, 777	+39. 9
México	1, 897, 851	1, 392, 623	+36. 3
Michoacán	1, 851, 876	1, 422, 717	+30. 2
Morelos	386, 264	272, 842	+41. 6
Nayarit	389, 929	290, 124	+34. 4
Nuevo León	1, 078, 848	740, 191	+45. 8
Oaxaca	1, 727, 266	1, 421, 313	+21. 5
Puebla	1, 973, 837	1, 625, 830	+21. 4
Querétaro	355, 045	286, 238	+24. 0
Quintana Roo	50, 169	26, 967	+86. 0
San Luis Potosí	1, 048, 297	856, 066	+22. 5
Sinaloa	838, 404	635, 681	+31. 9
Sonora	783, 378	510, 607	+53. 4
Tabasco	496, 340	362, 716	+36. 8

Table 4. Intercensal Population Growth in Mexico, 1950–1960—Continued

	1960 Census	1950 Census	Percent increase (1950 to 1960)
maulipas	1, 024, 182	718, 167	+42. 6
axcala	346, 699	284, 551	+21. 8
racruz	2, 727, 899	2, 040, 231	+33. 7
ıcatán	614, 049	516, 899	+18. 8
catecas	817, 831	665, 524	+22. 9

urce: Adapted from Union Panamericana: *América En Cifras* 1967: OAS, 1968.

Births and Deaths

An analysis of birth and death rates indicates the derivation of exico's high population growth rate. It has been estimated that in id-1967 the crude birth rate was 43.5 per 1,000 inhabitants and that e crude death rate was 9.0 per 1,000 inhabitants. Of total births and eaths, in 1965 there were 1,888,171 live births and 404,163 deaths (see ble 5). The individual states varied in 1965 as to births and deaths much the same pattern as did their relative growth in the intercensal period of 1950–1960.

At least two-thirds of the live births were by mothers of 29 years f age or less (see table 6). The age pattern of deaths in 1965 showed at 28.4 percent of the total were from infant mortality, with males aving a slightly higher rate in this category than females. Slightly ver 62 percent of the deaths fell in the less-than-45 years age bracket see table 7).

Table 5. Births and Deaths in Mexico, by State, 1965

State	Live births	Deaths
ederal District	237, 233	51, 981
guascalientes	15, 657	3, 002
aja California, North	32, 660	5, 298
aja California, South	4, 693	769
ampeche	9, 386	1, 660
oahuila	52, 197	8, 958
olima	9, 847	2, 115
hiapas	57, 494	17, 067
hihuahua	64, 902	12, 178
urango	42, 539	6, 340
uanajuato	94, 184	22, 491
uerrero	67, 361	12, 557

Table 5. Births and Deaths in Mexico, by State, 1965—Continued

State	Live births	Deaths
Hidalgo	51, 759	13, 10
Jalisco	132, 669	27, 43
México	113, 575	30, 84
Michoacán	104, 855	17, 54
Morelos	22, 411	4, 54
Nayarit	22, 043	4, 10
Nuevo León	61, 795	9, 69
Oaxaca	84, 265	27, 97
Puebla	104, 324	30, 62
Querétaro	21, 557	4, 65
Quintana Roo	2, 467	31
San Luis Potosí	58, 011	11, 90
Sinaloa	54, [illegible]71	7, 11
Sonora	44, 864	7, 97
Tabasco	30, 250	5, 18
Tamaulipas	51, 954	9, 40
Tlaxcala	20, 539	5, 02
Veracruz	137, 127	27, 69
Yucatán	33, 157	6, 30
Zacatecas	47, 825	8, 31
Total	1, 888, 171	404, 16

Source: Adapted from Union Panamericana. *América En Cifras 1967*. Washington, D.C.: OAS, 1968.

Table 6. Live Births in Mexico, by Age Group of Mothers, 1965

Age group	Live births (in thousands)
15 to 19 years	210
20 to 24 years	522
25 to 29 years	479
30 to 34 years	317
35 to 39 years	230
40 or more years	113
All others	9
Total	1, 888

Source: Adapted from Union Panamericana. *América En Cifras 1967*. Washington, D.C.: OAS, 1968.

Table 7. Death Rates in Mexico, by Sex and Age Group, 1965

Age group	Percent of total		
	Total (male & female)	Male	Female
Less than 1 year	28. 4	29. 6	26. 9
1 to 4 years	14. 7	13. 8	15. 7
5 to 14 years	5. 0	5. 0	5. 0
15 to 24 years	4. 3	4. 5	4. 0
25 to 44 years	10. 9	11. 6	10. 0
45 to 59 years	14. 0	14. 9	13. 0
65 to 74 years	8. 9	8. 7	9. 2
75 and over	13. 9	11. 7	16. 3
Total	100. 0	100. 0	100. 0

Source: Adapted from Union Panamericana. *América En Cifras 1967*. Washington, D.C.: OAS, 1968.

A study of the trends in births and deaths shows that in the 9 years from 1957 to 1965 total births per year increased steadily over the period, though not by large amounts, and total deaths generally decreased over those years, again, not by large amounts (see tables 8 and 9). Male births and male deaths exceeded those for females over this time period, and urban births gradually caught up with rural births and passed them in 1960. Urban deaths displayed the same trend but did not exceed rural deaths until 1962.

The trends in overall birth and death rates from 1959 to 1966 show a slight decline in live births per 1,000 inhabitants, from 45.6 to 43.3. Deaths per 1,000 inhabitants, however, showed a more pronounced downward trend moving from 11.4 to 9.2. In the years 1935–1939 the death rate was 23.3 and the birth rate 43.5. Stillbirths per 1,000 live births had an upward movement from 16.6 in 1959 to 21.4 in 1965,

Table 8. Number of Live Births in Mexico, 1957–1965

Year	Total	Male	Female	Urban (total)	Rural (total)
1957	1, 485, 202	765, 543	719, 659	732, 069	753, 133
1958	1, 447, 578	744, 392	703, 186	736, 413	711, 165
1959	1, 589, 606	815, 351	774, 255	781, 111	808, 495
1960	1, 608, 174	824, 166	784, 008	809, 567	798, 607
1961	1, 647, 006	845, 990	801, 016	827, 695	819, 311
1962	1, 705, 481	880, 648	824, 833	865, 249	840, 232
1963	1, 756, 624	904, 835	851, 789	947, 330	809, 294
1964	1, 849, 408	951, 448	897, 960	1, 007, 068	842, 340
1965	1, 888, 171	966, 102	922, 069		

Source: Adapted from Union Panamericana. *América En Cifras 1967*. Washington, D.C.: OAS, 1968.

while infant mortality fell over the years from 74.4 per 1,000 live births in 1959 to 62.3 in 1966 (see table 10). This substantial decline in infant mortality has had heavy leverage on the declining death rate, since infant deaths have accounted for almost 30 percent of the total. In 1960 male life expectancy was 57.6 years; female life expectancy was 60.3 years. By 1970 this is expected to change to 63.8 for males and 66.5 for females.

Table 9. Number of Deaths in Mexico, 1959–1966

Year	Total	Male	Female	Urban (total)	Rural (total)
1957	414, 545	217, 218	197, 327	200, 806	213, 739
1958	404, 529	212, 576	191, 953	196, 401	208, 128
1959	396, 924	209, 133	187, 791	193, 376	203, 548
1960	402, 545	212, 526	190, 019	199, 379	203, 166
1961	388, 857	205, 065	183, 792	197, 566	191, 291
1962	403, 046	212, 118	190, 928	204, 861	198, 185
1963	412, 834	216, 957	195, 877	223, 772	189, 062
1964	408, 275	216, 043	192, 232	223, 039	185, 236
1965	404, 163	214, 038	190, 125	223, 167	180, 996

Source: Adapted from Union Panamericana. *América En Cifras 1967*. Washington, D.C.: OAS, 1968.

Table 10. Trends in Birth and Death Rates in Mexico, 1959–1966

Year	Live births per 1000 inhabitants	Deaths per 1000 inhabitants	Stillbirths per 1000 live births	Infant deaths per 1000 live births
1959	45. 6	11. 4	16. 6	74. 4
1960	44. 6	11. 2	17. 2	74. 2
1961	44. 2	10. 4	17. 0	70. 2
1962	44. 2	10. 5	17. 0	69. 9
1963	44. 1	10. 4	17. 0	68. 5
1964	44. 8	9. 9	20. 9	66. 3
1965	44. 2	. 5	21. 4	60. 7
1966	43. 3	. 2	n.a.	62. 3

Source: Adapted from Union Panamericana. *América En Cifras 1967*. Washington, D.C.: OAS, 1968.

Population Mobility

One measure of the mobility of the Mexican people is the migration movement among the states (see table 11). From 1950 to 1960 a total of 1,894, 372 such movement was tabulated. The largest net gainer of migrants was the Federal District, with a gain of 462,338 people. The states of Baja California, North, and Mexico scored relatively heavy net gains, with more modest net gains going to Chihuahua, Morelos,

Table 11. Estimated Gross Internal Migration of Mexico, 1950–1960

States	Net migrations	Gross loss	Gross gain
calientes	−28, 634	34, 887	6, 253
California, North	+149, 112	23, 284	172, 396
California, South	−2, 739	11, 552	8, 813
eche	−6, 190	16, 334	10, 144
ila	−61, 947	74, 812	12, 865
a	+2, 221	15, 282	17, 503
as	−20, 107	48, 750	28, 643
ahua	+78, 535	25, 333	103, 868
ngo	−87, 491	96, 946	9, 455
al District	+462, 338	110, 158	572, 496
ajuato	−58, 665	110, 180	51, 515
ero	−37, 798	52, 033	14, 235
go	−52, 578	80, 948	28, 370
o	−11, 344	111, 569	100, 225
co	+164, 038	20, 856	184, 894
oacán	−127, 494	149, 761	22, 267
los	+24, 565	12, 312	36, 877
rit	−7, 052	23, 646	16, 594
o León	+85, 202	33, 381	118, 583
ca	−82, 633	93, 573	10, 940
a	−67, 703	92, 081	24, 378
taro	−28, 063	32, 867	4, 804
ana Roo	+6, 628	6, 356	12, 984
uis Potosí	−57, 035	66, 530	9, 495
oa	−24, 099	58, 232	34, 133
a	−56, 624	23, 118	79, 742
co	−11, 240	20, 410	9, 170
ulipas	+27, 331	42, 011	69, 342
ala	−25, 523	29, 979	4, 456
ruz	+42, 947	69, 521	112, 468
án	−27, 290	32, 313	5, 023
ecas	−82, 524	83, 965	1, 441
Total		1, 894, 372	1, 894, 372

e: Adapted from William W. Winnie, Jr., *Estimate of Inter-State Migration in Mexico: 1950–1960: Data and Methods.*

o León, Tamaulipas, and Veracruz. The states with the largest net s were Michoacan with 127,494, followed by Durango, Oaxaco, ecas, and others. The pattern reflects the growing opportunities e northern border states and the outstanding attraction of the ral District.

e substantial and increasing growth of the cities at the expense e rural areas is evidence in the rising rate of urbanization, in excf 5 percent in recent years. It is estimated that over 63 percent live in cities by 1975. The migrants to the cities tend to be young s, adding to the cities a higher percentage of total births and a youthful population component than exists for the national average. The rapid influx has also led to problems of overcrowding, the growth of urban slums, unemployment, and a substantial measure of poverty.

There has long been an international migration, especially to the West and Southwest United States. One component of this migration was temporary, that of the *braceros*, the Mexican farm workers who went seasonally to the labor-short farming areas of the United States West and Southwest.

Movement into Mexico exists largely in the form of a temporary but economically important segment of the population. In 1967 about 1.5 million tourists came to Mexico, a gain of about 8 percent over 1966. Tourists in 1967 spent an amount equal to 20 percent of Mexican exports that year. Mexico has had sporadic permanent immigration. There was a large influx of artists and professional people during and immediately after the Spanish Civil War in 1936, but no large mass movements since that time.

The people have become more mobile since the 1910 Revolution. The breakup of the large estates has encouraged mobility, as have industrialization, better transport, new irrigation projects, and government colonization projects. By law the people are free to move, both nationally and internationally. Population pressure on the old major farming areas has also stimulated movement, to the cities and to newly opening farming sections.

POPULATION PROBLEMS AND ATTITUDES

Mexico has developed a program to achieve self sufficiency in its food supply, which has been carried out quite successfully on irrigated lands. But the weakness of the remaining traditional dry-farming economy has driven millions to the rapidly expanding urban centers. The country is thus faced with a continuing struggle to accommodate fast mounting urban populations—to outpace the growth of urban and suburban slums, to provide housing, sanitation, employment, electricity, traffic control, and potable water. Providing water is especially difficult and costly because of the arid or semi-arid character of perhaps as much as 85 percent of the country, including most of the nation's population centers.

The government does not have a program for birth control, nor does it appear that popular attitudes in the country favor such a program. The government has moved positively and strongly, however, on reducing the death rate. A long-standing campaign against infectious diseases has reduced their incidence drastically; other efforts in public health and sanitation have contributed strongly to producing a falling death rate and to increasing life expectancy from between 30 and 40 years to over 60 years.

The threat of overpopulation is not generally viewed with great alarm. A survey taken on views of persons in different occupations

wed that employers and housewives tended to see the growing
pulation as being a cause of low salaries, members of the profes-
ns and clerics disagreed, and white collar workers were fairly evenly
it on the question. All of these groups, however, generally agreed
t it was not desirable to limit the population growth. A majority
ught such limiting would constrain economic progress; another
ge group opposed limiting population growth on grounds of moral-
and customs. Housewives especially opposed limitations, and joined
clerics in making the case on grounds of morality and customs.

A number of arguments for not attempting to control population
owth in the country have been advanced. Some feel that popula-
n pressure itself is a stimulus to creative new solutions. Others view
reased density as good for economic progress, and foresee increased
ploitation of natural resources. Many believe that rapid population
owth has accounted in some measure for Mexico's increased power
d prestige. Some fear the state's assuming control of life processes,
d believe that nature taking its course will produce an automatic
ution. Physicians typically do not feel that it is a problem they
uld address.

When the World Health Organization in the late 1950's tried to
mote family planning. Latin American nations, including Mexico,
l not support the program. In the United Nations in 1962, a resolu-
n was proposed to offer technical assistance on population problems,
it failed as Latin America did not support it. Mexico abstained from
ting in both the review committee and in the General Assembly.

A survey of women in the reproductive age group in Mexico City
owed that the ideal family size was an average of about 4.2 children.
ere was a tendency for a smaller ideal family size among the better
ucated.

CHAPTER 5

ETHNIC GROUPS AND LANGUAGES

1967, Indians comprised approximately 12 percent of the total can population. Indians are defined by the Mexican government ose speaking an indigenous language and who continue to prac- raditional Indian cultural patterns and live, for the most part, iditional communal villages. *Mestizos* (persons of mixed Indian Hispanic racial and cultural background) comprise about 80 per- of the total population. Their way of life assumes a blending of n and European value systems. The small Negro population is ntrated in the urban *barrios*, or slums, particularly in the city of cruz.

e cultural patterns of modern *mestizos* and Indians diverge be- n modernization and traditionalism. Indian ethnicity emphasizes nuity with traditional Indian values of the precolonial period. ns practice agricultural pursuits and live in rural villages which varying degrees of contact with the national culture around them. continue to speak indigenous languages, although a growing er are billingual. By contrast, the emerging national culture nstrates considerable blending of Indian and European cultures. omically, the national culture is increasingly diversified and rnized. Urbanization is in the ascendant. Status no longer de- s on traditional values of age, community service, or religious ob- nce, but on economic or occupational accomplishments.

the degree that Indians participate in the national culture, ethnic nctions blur. Today, many Indian peasants in the less isolated speak Spanish, practice a relatively orthodox version of Roman olicism, and participate to some extent in national politics. They part in national games, know something of national heroes, and ly celebrate national holidays. Government programs of land tribution and education have been fundamental in bettering the omic welfare of the Indian and integrating him into the national re.

HISTORICAL ETHNIC DEVELOPMENT

the time the Spanish arrived in Mexico in 1519, the Aztecs had lished their dominance in the Valley of Mexico and their influence ded from the Panuco River to Central Guatemala (see ch. 3, orical Setting). Because the Aztec sought not to kill other tribes but to capture them—and once having captured them, to exact tribute—there existed in Mexico at the time of the conquest a variety of tribes distinguished principally by their language. The principal language groups were Nahuatlan (of which Aztec is a dialect), Mayan, Zapotecan, Otomian, Totonecan, and Tarascan.

With the advent of the Spanish colonizers, the tribal system of social organization in Mexico ended. From conquest in 1533 until independence in 1821 the trend was toward reduction of independent Indian kingdoms to peasant village communities, simplification in the Indian class structure, and changes in government and religious practices as the Indians were increasingly integrated into Spanish culture.

Various factors encouraged the disintegration of cultural unity among the Indian tribes. The Spanish Crown looked on the Indians as its wards and therefore felt obliged to civilize and convert them in return for using their labor. Those Indians impressed into labor came into early contact with Hispanic culture, language, and religion. Those Indians seeking to avoid impression into labor—particularly working in the mountain mines—sought refuge in the early Roman Catholic missions and there, of course, were also exposed to Roman Catholicism and European cultural patterns. As few Spanish women came to New Spain, intermarriage between Spanish and Indians became common and, among some Indian groups, was encouraged as a means of gaining the status of the Spanish family into which one married. Social status came to be associated more and more with Hispanic heritage, thus furthering the break-up of many Indian ethnic groups.

In spite of an extensive process of racial mixing, by the time of Independence many Indian groups had managed to maintain their traditional values and ways of life. High density of population in Indian core areas did much to inhibit acculturation. In areas of Indian population concentration, as in the Yucatán Peninsula, Indians tended to remain racially purer and to retain their own language, religion, and laws. Indigenous cultural patterns in these areas were stable and complex, and trade and communication between the Europeans and the Indian groups were limited.

From Independence until about 1935, the process of racial mixing was greatly slowed down. Within the Indian groups class distinctions had virtually disappeared, and almost all Indians were *maciquales* or commoners. The one exception was a discernible class of tenants (*mayaques* or *tlalaites*) which cut across the ethnic lines. The gap between the urban Hispanic or *mestizo* way of life and the rural Indian patterns continued to widen. Attempts to convert the Indians to Roman Catholicism were gradually abandoned. Until the Revolution of 1910, the Indians were generally left to themselves with respect to education; the result was the retention of Indian linguistic and cultural patterns.

uring the first 30 years after the Revolution, an Indianist move- t developed among urban intellectuals. Indianists placed strong hasis on the autonomy of Indian groups and on their economic cultural independence from non-Indian groups. They supported continuation of the agrarian economy of the Indian peasant; local, onal, or ethnic as opposed to national folk customs; and the con- ed use of Indian languages. As a result of the spread of this philos- y, the national 6-Year Plan (1934–1940) contained provisions ng special attention to the problems of Indian ethnic groups, par- larly those living in isolated rural villages (see ch. 3, Historical Set-). The Indianist activity culminated in 1936 in the formation national Department of Indian Affairs. The effect of the Indian- movement was to inhibit the integration of the remaining Indian ic groups into the national culture.

rom 1940 to the present, efforts on the part of the government have to integrate Indian ethnic groups into the national society. These rts have been largely successful. At the time of Independence, 85 ent of the rural population and 24 percent of the population of ico City was still pure Indian in ancestry and cultural patterns; y, the Indian population has shrunk to about 10 percent of the l population. The Rural Education Program has spread the use he Spanish language and acquainted Indians with European cul- l values. The opening of new and better communications media means of transportation, under direct government sponsorship, helped as well to spread national culture to rural areas.

ETHNIC DIVISION AND IDENTIFICATION

reas of distinction between the *mestizo* majority and members of ian ethnic groups are: 1) locality of birth or residence, generally an for *mestizos* and rural for Indians; 2) language spoken, Spanish *mestizos* and indigenous for Indians; 3) literacy rates, lower among Indians; 4) surname, whether Spanish or Indian (the adoption of panish surname is common among *mestizos*); 5) costume; and 6) ious customs and beliefs, such as house type, method of cooking, hod of burying the dead, and celebration of fiestas and dances. ause the course of modernization in many cases blurs these dis- tions among individuals, often the most useful means of identifica- is whether the individual thinks of himself as an Indian and ther he lives in a community generally regarded as Indian.

he greatest concentration of Indian ethnic groups is found in cen- and southern Mexico. In the extreme north of the country few genous groups remain; the Spanish dispersed many of the no- lic Chichimec tribes they found. The most culturally and racially e Indians are found in the Central Highlands and on the Yucatán insula. Located in the heart of ancient Indian empires in virtually inaccessible territories, these areas have only recently been penetrated by extensions of transportation and communications networks. The very size of these Indian groups and the complexity of their social and political organization give them an almost impregnable ethnic cohesion.

In the northern part of the country, in the mountains of Nayarit, there survive two groups totaling about 9,500, the Cora and Huichol. In San Luis Potosí in the Northeast, there are over 100,000 Indians who speak Huastec, Nahuatl, Pame, and Otomí. The Huastec are the most numerous of these. Further south, there are more than 300,000 monolingual and bilingual Indians in the state of Veracruz, including the Totomac—the largest group—the Populaca, the Zapotec, the Otomí, and some Nahuatl-speaking peoples.

In the central zone there are only a few hundred isolated individuals belonging to small groups in Aguascalientes. There are about 3,600 Otomí and Chichimeco-Jonaz in Guanajuato. Jalisco has around 8,000 Nahuatl-speaking Indians and some Huichol speakers. There are over 58,000 speakers of Otomí and Tarasco in Querétaro. In nearby Hidalgo, there are speakers of Otomí, Nahuatl, and Tepehua. In the state of Mexico and the Federal District there are some 215,000 speakers of Mazahua, Nahuatl, Otomí and Matlatzinca. In the state of Puebla are to be found 293,000 speakers of Nahuatl, Mazatec, Mixtec, Otomí, Popoloca, Totomac, and Zoque. The state of Tlaxcala has 18,000 Nahuatl and Otomí speakers. South of Mexico City, there are 9,000 speakers of Nahuatl in Morelos. Westward, the Tarascans make up most of Michoacán's Indians. The state of Colima has only scattered small Indian groups.

In the Southern Pacific area, there are speakers of Amuzgo, Nahuatl, Mixtec, Tlapanec, Tarasco, and Chontal in the state of Guerrero. In Oaxaca one finds Amuzgo, Chatino, Chinanteco, Chocho, Chontal, Cuicatec, Huave, Ixcateco, Nahuatl, Mazatec, Mixe, Mixtec, Popoloca, Tlapanec, Trique, Zapotec, and Zoque. The trans-isthmian region of Chiapas has 381,000 speakers of Chol, Maya, Tzeltal, Tzotzil, Zoque, Mann, Tojolabal, Quiche, Lacandon, and Nahuatl.

In the Southern Gulf region, in Tabasco, there are some 24,000 Chontal speakers. In the states of Campeche, Yucatán, and Quintana Roo there are about 357,000 speakers of the Mayan language.

Language and geographical location are the principal distinguishing criteria among Indian groups today. Physical appearance also can distinguish one group from another. There are variations, for example, in skin color, facial characteristics, and physical size.

ETHNIC GROUP CHARACTERISTICS

Apart from distinguishing them according to language and geographical location, the Mexican Indians can be categorized broadly ettlement pattern into nomadic, semi-nomadic, and sedentary. The group is by far the largest and best known.

he northern territories are populated by small groups of Indian ters and gatherers, who fish on a seasonal basis. These people have permanent settlements or villages, and practice no regular agri- ural pursuits. An example of such a group is the Tarahumara, live in the Western Sierra Madre in the states of Chihuahua and rango. Apart from fishing and hunting, the Tarahumara occasion- engage in commercial lumbering, work occasionally on nearby *los* (communal lands), or pan for gold.

mong the semi-nomadic Indian groups are the Seri, who live in state of Sonora. They spend half of the year fishing in the Gulf California and the other half hunting and gathering in the interior. similar group is the Lacandon Indians, who live in the state of iapas. Among the groups practicing slash-and-burn agriculture the Pápago, in the state of Sonora, the Kikapoo, in the state of huila, and the Hurve, from the state of Oaxaca.

mong the major groups practicing commercial and sedentary agri- ture are the Tarasco, of Michoacán; the Yaqui, of Sonora; the Maya Yucatán; the Zapotec of Oaxaca; the Chontal of Tabasco; and the astec of Veracruz and San Luis Potosí.

Vithin the sedentary groups, Indians work on local estates and nunal lands, engage in seasonal wage labor, or practice subsistence iculture. In Chiapas, the Tzotil, Tzeltil, Mann, Chol, and Lacandon lians work on coffee plantations, on sheep ranches, at carding wool, at cutting wood. In Oaxaca, the Zapotec, Maztec, Mix, Chicatec, Trique work on coffee plantations, at sugar refineries, and in the ies. The Yaqui and Maya of Sonora work on farms, in the mines, part-time on the railroads. The Chontal of Tabasco work in sugar neries and on coffee and banana plantations. The Otomí are estate kers. Approximately 200,000 persons per year are migratory kers, of whom the majority are Indians from the states of Chiapas, errero, Nayarit, Oaxaca, Puebla, and Veracruz. The Tarasco of hoacán are migratory workers in both Mexico and the United tes.

ubsistence agriculture is practiced among the following Indian ups: the Tepecano of Jalisco, the Totique, Tojolabal, Mann, Chol, til, Tzeltal—all of the state of Chiapass—the Chontal, Mix, zatec, Mixtec of Oaxaca; the Mazahua of Mexico; the Totomac of ebla, Sierra de Veracruz and Hidalgo; the Tlapanec of Guerrero; Cora of Sierra de Nayarit; and the Otomí of Mexico. The diets most of these groups are often protein-deficient, and they are sus- tible to such diseases as malaria, intestinal parasitosis, smallpox typhoid. Members of some of these rural groups are moving to an centers where they are losing their identity as they become part of the national culture. The rural groups which do remain intact hav a population growth rate much lower than that of the rest of th country (see ch. 4, Population).

Various Indian groups depend on handicraft production for thei livelihood. In the Tarascan-speaking core area, for example, th Tanaco practice weaving with century-plant fibers; the Cocucho mak pottery; the Paracho manufacture wooden objects and cotton cloth the Nahuatzen weave woolens; the Uruapan paint gourds; and th Santa Clara del Cobre produce items of beaten copper. The rul against marriage outside the community help to protect the continuit of handicrafts associated with particular villages and thus the cor tinuity of Indian economic specialization.

In terms of settlement organization, Indian agricultural commun ties usually consist of agricultural lands, forest areas, and wastelan Various settlements group around a central *calecera* or governme town. The central town is often subdivided into a number of wards *barrios*. The pre-Revolutionary town chiefs, the *caciques*, have most areas been replaced by elected leaders. Indian housing vari considerably depending on climate and available materials. For e ample, the Seri use boughs covered with sponge materials and turt shells; the Mixtec live in adobe houses roofed with shingles or tile In cold climates, the walls are usually of adobe with shingle, til stucco or palm leaf roof, although straw is sometimes used. In warm climates the walls are usually of reeds or timbers and the roofs straw or palm leaf.

The most important social institution among agricultural India groups is the family. Marriages are often arranged by the parents both parties through an intermediary or friend. Mutual consent of t partners, their parents, and important relatives is necessary; if a one of the interested parties resists, the marriage cannot take pla Marriage serves as a means of establishing kinship relationships amo families within the group, a device for improving one's social stat through marriage into a higher-status family, an arrangement for economic division of labor, and a means of having children born a reared.

Within the context of the larger group, it is the household (usual made up of husband, wife, and their children) which is accorded soci economic, and political recognition. Unmarried people are not garded as full-fledged members of the community, and they cann participate in group decisions. If one's marriage is terminated throu divorce or death of one of the partners, the group will not accord ori nal social status to the surviving partner until he remarries. But ma riage alone is insufficient to establish the social standing of the coupl they must have children to completely validate their position in t group.

[ndian families do not practice primogeniture (see ch. 6, Social ructure). At the death of the parents, their assets, including land, divided equally among the surviving children. In order to prevent se assets from falling into the hands of members of other groups, re are rigorous rules against marriage outside the particular Indian oup itself. The continual division and subdivision of assets produces ommunal ownership pattern with the Indian group.

Within the Indian village, much importance is attached to the par- ipation of each household in both private and public religious uals. The highest religious prestige is accorded to those very old useholds whose moral ascendancy is great by virtue of years of perience, contribution to the community, and ritual performance. On private or family level, pre-colonial Indian rituals and beliefs con- ue. Publicly, Roman Catholic ceremonies are scrupulously observed.

Within the Indian community, group interests dominate over those the individual. The community emphasizes adjustment of individual ferences in the name of group solidarity. Although the individual responsible for supporting himself and his immediate household, goals are expected to be pleasing the gods and contributing to the nmunity rather than accumulating individual wealth.

The non-Indian ethnic groups comprised by foreign nationals tend congregate in urban centers. Their jobs are generally prestigious d well-paying. The foreigners tend to be industrial executives, mem- rs of various professions, merchants, missionaries. For the most part y retain their national culture and identify with their own national oups. According to the 1960 Census of Mexico, foreigners constituted s than 1 percent of the total population. The most numerous are om the United States (almost 100,000), followed by those from ain (almost 50,000). Other foreign nationals are from Guatemala, rmany, Canada, France, and Central and South American countries.

INTERETHNIC RELATIONS

Relationships between the Indians and the *mestizos* are complicated the geographical and cultural distance between the two groups and distinctions of social class (see ch. 6, Social Structure). *Mestizos* nerally live in the larger towns while Indian groups remain scattered roughout the hinterland. For the Indian, emphasis is on maintaining norms and stability of his group; for the *mestizo* emphasis is on justment and change to bring his values and ways of life into con- rmity with national patterns. The Indian is thus traditional and ngs to group solidarity; the *mestizo* is transitional and seeks sta- ity. For the Indian the supreme economic value is land, which he rks himself; the *mestizo* is concerned with the economics of mod- ization. For the Indian, power and prestige are attributes of office and position, which one either has or has not; the *mestizo* sees powe as a value to be achieved by the individual. The Indian places powe and prestige in his group; the *mestizo* places it in the hands of individuals. These differences in cultural values inhibit interethnic communication, although this is gradually breaking down.

Personal relations between *mestizos* and Indians are limited by differences in language use, interest, customs, and status; impersona relations and casual contacts are the most common. There are considerable commercial and economic dealings among the various groups, bu the communication such dealings produce is impersonal. Relationships of ritual kinship, created through baptism, give rise to a networ of personal social, economic, and religious relations.

The ways in which the various ethnic groups relate to each othe are largely determined by their mutual perceptions of friendlines or antagonism of neighboring groups. Among Indian groups, th Zapotec and Zinacantecos consider themselves superior to the Mix and the Chamules. Relationships between Indian groups and *mestizo* are affected by the fact that urban *mestizos* are especially likely to loo upon rural Indian groups as inferiors. Such *mestizo* prejudices agains Indians are gradually fading, however. Only in Chiapas do they remain strong as a factor dividing groups and retarding communicatio among them. In the states of Oaxaca, Michoacán and Veracruz, there i increasing communication and understanding among the groups Negroes are still considered inferior by *mestizos* in some areas. Relations between Indians and Negroes are relatively friendly, neithe group assuming its own superiority or inferiority.

In interethnic perceptions, the important factor is environment. Fo example, urban *mestizos* in Chiapas tend to perceive rural *mestizo* as Indians. For them, the important criterion is whether the person' way of life is rural or urban.

Forms of address between *mestizos* and Indians indicate how eac views the other. *Mestizos* frequently address Indians by their prope names, omitting the use of *señor* or *señora*. They may address all Indians in the familiar "you" form (*tu*), or—as in Veracruz—address al Indian women by the same name. Indians generally accept these conventions. When meeting a *mestizo*, they remove their hats in a respectful manner and almost always address him with the polite "you" form (*usted*), when they are acquainted with it.

Although full-blooded Indians have emerged as national leaders— the most famous, perhaps, the Zapotecan Benito Juárez—in a community of any size and ethnic mixture, the political administration i almost entirely in the hands of the *mestizos*. This is especially the case in Chiapas, Veracruz, and Guerrero. However, in the urban areas o these same states some Indians and a few Negroes have attained fairl high office. Occasionally, it is customary not to pay Indians holding lower administrative or local offices, but *mestizos* in similar offices are usually paid. In the rural areas, enlistment of persons for road work and similar activities falls the most heavily on Indians and poor *mestizos*.

Actual conflict situations among the Indian groups or between the Indians and the *mestizos* are rare. Where they do exist, they may be the result of: conflict among Indian groups due to land pressure and general economic competition; hostility of Indians towards *mestizos*, resulting from earlier *mestizo* movements into the area and their seizing of Indian lands; or mutual hostility, especially *mestizo* mistrust of certain Indian villages and Indian mistrust of *mestizo* politicians and administrative functionaries. Relations between Indians and the few remaining Negroes are usually peaceful.

ACCULTURATION AND INTEGRATION

Integration of Indian ethnic groups into the national culture is progressing rapidly. Today the ability of local groups to set their own patterns of village organization is breaking down. There are increased limitations of the authority of the local *caciques* (village head men) in favor of centralized national authority, in an effort to make the community responsive to national rather than local needs. *Mestizo* acquisition of large land holdings in Indian core areas has resulted in a reorganization of agricultural production which is incompatible with the older, quasi-feudal village organization. Racial and ethnic groups are becoming increasing intermingled, especially at the *cabecera* (agrarian subdivision of land) level.

There have been positive incentives to national integration of Indians. The *ejido* (communal landholding) system has offered Indian groups widened opportunities in terms of agricultural productivity. The Rural Education Program, which is assimilative in character, has acquainted formerly closed Indian groups with modern practices and ways of thinking. The attractions of the cities, combined with population pressures on the land, have drawn large groups away from their ancestral homes. In some cases, entire groups move into urban areas at one time and live in one neighborhood. Under the pressure of adjustment to urban life and economic diversification, Indian ethnicity breaks down.

The extent of movement from one ethnic group to another is increasing, especially as a device to improve social status (see ch. 6, Social Structure). Movement is accomplished through "passing" or acquiring some of the prestigeful cultural traits of the group into which one moves, and—in some cases—separating oneself from close ties to his former group. For example, especially in Michoacán, marriage of an Indian woman with a *mestizo* man almost automatically gives her his social status. In Chiapas, it is customary to adopt a Spanish surname as one becomes *mestizo* or more Europeanized culturally. But in most cases, the most approved form of racial mixing is through changes in language use. Movement between ethnic groups is likely to result in movement from the original ethnic group to membership in the wider society.

There are two distinct points of view in Mexico on the future of the Indian. The Europeanists argue that the only alternative open to the Indian is to become part of the mainstream of western civilization and to learn its values and adopt its way of life. Indians should be trained in a common Spanish language, in orthodox Roman Catholicism, and in gaining industrial skills which will make the Indian economically fit for modern urban life. Indianists, on the other hand, argue that the Indians have a particularly rich cultural heritage which must not be lost. Modern economic technology must be applied to solving the basic problems of rural and urban poverty. At the same time, the cultural patterns of the Indians should be preserved wherever possible. In practice, what is emerging in Mexico is a practical combination of these two points of view, with slightly greater emphasis on the first as the country continues to develop.

The Indians are increasingly represented in the national decision-making process, and the Indianist cultural bias in the country will continue to favor this development. Improving the lot of Indian groups was one of the major symbols of the Revolutionary tradition, and it is still very much alive today. Most Mexicans are proud of their Indian ancestry and identify their nation with the Indian rather than with the Spanish heritage.

GOVERNMENT POLICY AND PRACTICE

The Mexican government, since the Revolution, has actively worked to integrate Indian groups into the national society. Government programs of land redistribution, technological assistance and education have done much to improve Indian welfare.

Although the government in 1856 provided by law for the restitution of precolonial communal lands to the Indians, by 1910 over 95 percent of the rural population was still without land. The Constitution of 1917 also contained such a provision and, under President Álvaro Obregón (1920–1924), redistribution of land was begun. Under Obregón, 4 million acres were redistributed; under his successor, Plutarco Calles, over 20 million more were restored to the *ejidos*. In 1936, under President Lázaro Cárdenas, a Department of Indian Affairs was created to give special attention to the problems of Indians, especially those in isolated villages. This department and its activities ran into opposition on the grounds that it was providing services to

ecial segment of the population at the expense of the non-Indian
ation. Nevertheless, by 1940 an additional 45 million acres had
edistributed to the Indians.

help the Indians make full use of the restored land, the govern-
in 1942 established Indian brigades to instruct Indian communi-
modern agricultural methods. The brigades offered instruction
p diversification, animal husbandry, pest and disease control,
he use of modern agricultural machinery. They helped organize
cer and consumer cooperatives, repair old roads and build new
and install better telecommunication networks.

addition to providing for the redistribution of land to the Indians,
onstitution of 1917 also provided for free compulsory education
ll Mexican citizens. Programs of mass education were started in
920's and continue today with emphasis since the late 1930's on
education. The Rural Education Program has encouraged the
opment of bilingual patterns and acquainted rural Indians with
rn specialized jobs for an eventual move to cities or for greater
mic diversification in the countryside.

LANGUAGE AND COMMUNICATION

e official language in Mexico is Spanish, and the government uses
uage as the criterion for ethnic membership. The 1960 Census
ded almost 26 million persons speaking only Spanish, slightly
1 million speaking an indigenous language only, and almost 2
on speaking both Spanish and an indigenous language.

ere remain a large number of Indian languages and dialects, cor-
nding in most cases to the names of the groups which speak
—Nahuatl, Trique, Mixtec, Otomí, Tarascán, and Totonac to
just a few. In that part of Mexico just north of the Isthmus of
antepec there is today a diversity of language types which would
rd to find anywhere in the old world, even in the highly diversified
s of Asia. There are no states or territories in the country which
for speakers of one or more Indian languages.

e geographical centers of Indian language use survive as a series
olated "islands." These are most common in the eastern portion of
entral Highlands, on the Northern and Southern Gulf Coasts,
in Yucatán. Only in a few places are the speakers of Indian lan-
es sufficiently densely settled as to constitute more than 60 percent
e population of the area. In 1960, almost 88 percent of those speak-
nly an Indian language were concentrated in four southern states
in three central states; Yucatán, Oaxaca, Chiapas, and Guerrero;
la, Veracruz, and Hídalgo.

mmunication among Indian groups and between *mestizos* and
ans is hampered by language differences. As the indigenous mono-

lingual population constitutes less than 3 percent of the whole population, however, Mexico does not have a serious national communications problem. Since the inception in 1937 of bilingual teaching programs, the number of monolinguals has been reduced and some of the Indian dialects have disappeared. The recognizable density of Indian language use in particular areas should allow concentration of bilingual instruction in specific geographical sections. With the gradual eclipse of language as the prime focus for ethnic solidarity, chances for eventual cultural integration are increasing.

CHAPTER 6

SOCIAL STRUCTURE

hnicity, income, location of residence, occupation, and posses-
s—particularly in the form of land—are the factors that interact
rm the pattern of social distinctions in Mexico.

ecause tribal Indians are largely apart from the national social,
omic, and political life and are geographically isolated as well,
are apart from the national pattern of stratification. On the social
urban unskilled workers and rural plantation workers of Indian
West Indian Negro descent are the lowest. Modern Indians, usu-
agricultural peasants or small town employees, come next, fol-
d by those, usually Indians as well, who work on family owned
tations and small farms. Somewhat higher on the scale are In-
s and *mestizos* (persons of mixed Indian and European descent)
are largely agricultural wage earners working on large *ejidos*,
ommunal lands. Next come middle-class artisans and merchants of
arger towns, usually *mestizos*, and the metropolitan middle class,
e up of the growing group of white-collar workers and semi-
essional people. At the top is a small group composed of large-
owners and operators, financiers, intellectuals, artists, and so
h.

here are certain stresses and strains in the system, many of them
ered in urban-rural distinctions that cut across many of the other
rminants of status. These are particularly disturbing to those
gers newly arrived in the cities, for they often find that social
es, though similar to what they have known, are subtly but dis-
ly different. Because these rural-urban migrants are numerous
tend to congregate in *barrios*, or slum neighborhoods, their accul-
tion to urban values and ways of life is frequently a long and
ult process.

uch of the wealth of the upper class comes from ownership of
n and rural real estate, sugar, coffee, and other commercial enter-
es. In the past, this group has tended to dominate much of the
ical and social scene, but as the middle-class power base increases
ze and strength, this older pattern is giving way to a system of
ed powers among the various social classes. The political influence
remains to the upper class is supported to a large extent through
stem of close family relationships.

OVERVIEW

The social class structure of Mexico is the result of the interrel tionship of three basic factors. The first is the ethnic, cultural, polit cal, and economic patterning characteristic of the indigenous Indi population. The second is the pattern characteristic of Hispanic trad tion, which was superimposed on the traditional Indian structure the beginning of the 16th century. The third is the pattern chara teristic of modernization. The result of the combination of these thr factors is a highly complex series of social class gradations, oft based on different sets of criteria for measuring status or class stan ing. In the Indian and Hispanic traditions, social status was and ascribed, though on the basis of entirely different standards; in t modern tradition, status is achieved.

Almost all Mexican nationals feel themselves to be part of an int grated social system with generalized values and goals. There are fe groups which remain so geographically or culturally isolated as consider themselves, or to be considered by others, as separate fro the national society. However, there are degrees to the feeling belonging to the national society, depending on geographical, cultura and occupational factors (see ch. 5, Ethnic Groups and Language ch. 21, Labor).

The characteristic basis for social distinctions is ethnolinguisti The Federal Government classifies as Indians those who speak indigenous language and maintain in relatively pure form their trad tional cultural patterns. *Mestizos* are persons of mixed Indian an Spanish descent. They usually speak Spanish and their cultural pa terns are a mixture of the Indian and Hispanic types. Whites Europeans are those whose cultural traditions have been maintaine since colonial times. The estimated 1967 class figures by racial ethnic groups are: Indians, 3.5 percent; *mestizos*, 88 percent; an Europeans, 8.5 percent.

Cultural criteria operate somewhat ambiguously depending on t point of view which one takes within the society. The upper econom classes regard the cultural and educational principles as meaning t extent to which one's culture and education are European in derivatio The middle economic groups emphasize a blending of indigenous an European patterns. The lower classes retain adherence to tradition Indian patterns.

Under the impetus of social and economic modernization, status partly determined by environment. Rural village or urban residen determines not only the style of life but working conditions and soci position as well.

The various principles for determining status overlap extensivel Rural village inhabitants are more likely than not to be ethnolingui ly Indian, traditional in culture and education, and economically advanced than other segments of society. Middle-class urban llers may be ethnically *mestizo;* culturally and educationally a d of Indian and Hispanic types; occupationally artisans, small nessmen, or members of the lower governmental bureaucracy; and omically in the middle. Upper-class urban residents are largely opean in ethnicity, education, and cultural outlook, as well as being ie economic and occupational top of the society.

ue in large part to the social, cultural, educational, and above all omic diversification produced by modernization, a relatively small er class, a growing middle class, and a large lower class are to be id in the urban areas. In the rural areas, there is an even smaller er class than in urban centers, a small middle class, and a very large er class. These rural conditions are largely due to less ethnic and ural blending. fewer educational opportunities, and less economic rsification.

onsiderable relaxation of the social class lines has occurred since Revolution. Modernization and urbanization have greatly speeded his process by breaking down ethnic, social, and cultural barriers cial mobility. Large numbers of Indians and *mestizos* have moved their traditional villages to cities in search of the greater occuonal diversity and economic advancement that these center offer. ulation pressure on the land has also encouraged this developt. On the land itself, agricultural reforms such as land redistribu have resulted in more social mobility in the rural areas as well. al emigration has produced crowding and often material depriva in city *barrios* or slums; their residents are often unprepared for cities, just as the cities have been unprepared for them.

SOCIAL STRATIFICATION

atterns of stratification have developed to their present state since Spanish Conquest. Before the coming of the Spanish Contadores, there was no highly developed system of class among the genous populations. To this day, few social class distinctions are e within Indian groups.

y the end of the 16th century, the following relatively rigid caste em predominated from top to bottom: (1) The *peninsulares* were ons who had been born and reared in Spain; (2) *criollos* were dren of Spanish men and women residing in Mexico; (3) *mestizos* descendants of Spaniard and Indian; (4) *castizos* were descend of Spaniard and *mestizo;* (5) *españoles* were descendants of niard and *castizo;* (6) *mulattos* were descendants of Spaniard and ro; (7) *morissos* or *moros* were descended from Spaniard and *atto;* and (8) at the bottom of the stratification scale were *zambos,* were descended from Indian and Negro ancestors. During the colonial period, the sole criterion of status was racial or ethnic origin.

For determining status, the ethnic criterion continued until fairly recent times. Today, though other criteria have emerged, Mexicans remain conscious of ethnic brackgrounds; they believe that the diversity of backgrounds enriches their cultural heritage.

Shortly after the Spanish Conquest, a second criterion for determining stratification emerged. A conceptually distinct but overlapping system of stratification developed in the form of the economics of possession (especially possession of land). The importance of this economically derived criterion has been on the increase since colonial times. As modernization continues, it is likely to offset other criteria.

The fact that ownership of land became an important criterion of status helped after independence to break down the system of rigid class distinctions based on ethnic or ethnolinguistic factors. By placing high status upon the ownership of land, the land itself became socially as well as economically desirable. *Mestizo* elements began to develop into an incipient middle class shortly after independence; this class had its administrative roots in the government bureaucracy. After independence, many middle-class *mestizos* acquired land and became known as *rancheros*. Many descendants of the *rancheros* have since left the land and moved to cities, contributing to the development of the urban middle class.

The middle class has increased in size and improved in material standards of living steadily, especially since 1950. In 1950, persons earning less than 100 pesos per month (12.50 pesos equal US$1.00) constituted 40.67 percent of the total population; those earning between 100 pesos and 300 pesos per month comprised 12.[illegible]7 percent; and those earning over 1,000 pesos per month made up 1.43 percent of the total population. The comparative 1965 figures were: persons earning up to 300 pesos per month constituted 41.5 percent; earners between 301 pesos and 500 pesos per month made up 26.1 percent; those between 501 pesos and 750 pesos per month comprised 12.5 percent; from 751 pesos to 1,000 pesos per month, 9.5 percent; from 1,000 pesos to 2,000 pesos per month, 7.5 percent; and over 2,000 pesos per month, 2.9 percent of the total population. The data suggest a large increase in numbers of those in the economic middle, especially reflected in urban areas.

Since 1965, the middle and lower socio-economic classes have increased in numbers, and the upper class has experienced a slight decrease. These shifts have been somewhat more gradual than previously; this is probably a reflection of overall population increase. By 1968, the upper class (families earning more than 5,000 pesos yearly) had decreased to 9.4 percent of the population from 11.4 percent in 1965. The middle class (families earning between 2,000 and 5,000 pesos yearly) increased to 36.4 percent of the population in 1968 from 35.7

ent in 1965. The lower class (families earning less than 2,000
›s yearly) also increased; in 1968 it comprised 53.9 percent of the
ılation, while in 1965 it comprised 52.7 percent. These comparisons
into account a rise in the socio-economic scale of approximately
0 pesos in the incomes of all socio-economic groups.

he greatest increase in middle-class membership has occurred in
northern and north Pacific states; the lowest growth rate in the size
he middle class and the highest growth rate of the lower class is
rded in the south Pacific and Gulf states. These last two are also
areas of the lowest rate of population growth and the highest inci-
ce of poverty.

ccupation early came to be a criterion of status. In colonial times,
most prestigious persons, by occupation, were urban priests and
r clerical personnel. Next came the military officers and civil ad-
istrators, owing direct allegiance to the Spanish king. Below these
e the regular soldiers. After these came the craftsmen and artisans,
vell as small traders. At the bottom of the colonial occupational
cture were the servants and unskilled Indians. By the end of the
century, occupational diversification was producing the begin-
gs of a middle class. With the advent of modernization, occupa-
al differentials have increased rapidly in both the cities and rural
s. In the countryside, the early *rancheros* considered themselves an
pient aristocracy. It was from their ranks that many of the revolu-
ary heroes emerged. Owning a small farm or ranch remains one
he surest means of improving social status in rural areas.

ccupational and functional diversification is continuing, especially
he urban centers, stimulated in large part by modernization. How-
, in the rural parts of the country occupational selectivity is also
ening, as a result of better transport and communication and pro-
ms favoring land redistribution. The social structure is adjusting
his changing situation by making finer class distinctions, and in-
singly status is awarded on the basis of individual achievement
ier than group ascription. In urban center and rural village alike,
ıpational criteria of stratification favors the growth of the middle
s.

ducational background and attainment were and are among the
t important criteria of status. During the early colonial period,
nal education was allowed the *mestizo* only if he could prove his
ent from a Spaniard. This lent educational support to the basically
ic stratification system of that time. In the 1920's, *mestizos* were
erally educated in federally supported schools; and Indians were
ely left to the processes of informal village education. Since the
)'s, large-scale efforts have been made to provide the Indian vil-
ers with formal schooling, training in economic remunerative skills,
European cultural traits (see ch. 5, Ethnic Groups and Lan-
ges; ch. 9, Education).

As a stratification criterion, education is identified with acquisition of European and North American patterns of thought, cultural values, and practical skills. Upper-class persons are likely to be educated outside the country. Members of the middle class are educated at home in schools patterned after European types. Members of the lower class, especially rural villagers, have limited exposure to these sorts of schooling. However, great strides have been made in raising the literacy rate and training people in the diversified occupational categories. Education has been a force working towards upward social mobility. This is especially the case in the cities (see ch. 9, Education).

Cultural status is determined by closeness or distance from European and North American standards of culture, the tangibles of which are language use and style of dress. The closer the patterns or values to these standards, the higher will be the status attached to their possessor. For this reason, the Indian operates on a cultural level which deprives him of high status in some circles. These cultural distinctions remain the strongest in rural areas. In the urban areas, these distinctions are increasingly blurred. The urban-rural gap between cultural patterns combines with the economic criteria in a mutually reinforcing stratification pattern.

There are four important considerations about the relationship between urban-rural patterns of stratification and economic patterns. First, the economic base of the urban middle class is stronger than that of the smaller rural middle class. According to 1965 figures, 10.5 percent of rural families earn more than 1,000 pesos per month compared with 40.6 percent of the urban population for the same income group. Second, the incomes of all classes are higher in urban areas. Third, members of the lower class with the lowest incomes are to be found predominantly in the rural villages. Fourth, upper class groups are to be found predominantly in urban centers.

Economic, occupational, ethnolinguistic, cultural, educational, and urban-rural criteria combine together in a mutually reinforcing pattern of status determination. Educational attainment is generally higher through all social classes in the cities than in the villages. There is a higher rate of correspondence between educational background, income, cultural values, and class standing in the cities than in the countryside. Those living in urban centers find a higher rate of correspondence between educational training, income, occupation, and the means to secure and maintain their standing in the stratification system than do rural villagers. In the cities, education becomes not so much a badge of ascribed status as a prerequisite for achieved status.

URBAN AND RURAL VARIATIONS

Before the Revolution, there was tremendous contrast between the life styles of the cities, emphasizing European cultural patterns, and

ral villages, which were largely underdeveloped. This urban-rural
ntrast highlighted the ethnolinguistic, racial, and economic criteria
social class.

Since the Revolution, much official policy has been directed toward
idging the gap between rural and urban class systems, toward pro-
ding villagers the fluidity of the class system of the cities. In 1910,
ere was little economic base from which to develop such fluidity.
lmost all the arable land was in the hands of the *hacendados*, or up-
r-class estate owners, most of whom were cosmopolitan and Euro-
an in cultural outlook. Of the 70,000 villages listed in the census of
10, 55,000 were on *hacienda* (estate) lands and directly under the
pervision of the estate owners and managers. Much effort has been
ade since then to narrow the gap between upper and lower rural
asses, on the one hand, and between the growing prosperity of all
asses in the cities and the worsening economic conditions in rural
eas. Much of this effort has been successful. Land has been taken
vay from the *hacendados* and redistributed to the lower class, giving
an economic basis for moving into the ranks of the middle class.
owever, growing fluidity of the rural class structure has been slowed
several factors: (1) many members of the lower class are untrained
running their own individual farms, (2) many have worked on
e-crop plantations and are unused to agricultural diversification—
ey do not understand market rather than subsistence economic mech-
nisms; (3) many better-trained people have moved to the cities.

A number of educational programs have been developed to narrow
e gap in the social structure, the most important of which is the
ural Education Program, begun in the 1920's (see ch. 9, Education).
mphasis in this program is placed on bettering the economic, social,
d cultural conditions of the rural Indians (see ch. 5, Ethnic Groups
d Languages). In the 1920's emphasis was placed on evolutionary
ther than revolutionary imporvements. In the 1930's, land redis-
ibution programs were speeded up, and greater emphasis was placed
preparing the rural population in modern economic and occupa-
onal skills. Since the early 1940's, efforts have been made in the direc-
on of producing and enlarging an entrepreneurial class of economi-
lly independent farmers, artisans, and small manufacturers.

Much of the gap between rural and urban social patterns has been
idged, but the rigidity of class differentials and differences in stand-
ds of living remain. It is probable that class rigidity in the rural
eas will gradually disappear in favor of a more fluid system as the
sult of improving economic opportunities, better means of trans-
rtation and communication, and more uniform educational oppor-
nities and cultural patterns. Greater mobility of the urban class
ructure may be slowed somewhat by the problem of the overcrowded
rban lower class.

Except within the upper class, there are few restrictions on intermarriage among the classes. Class boundaries are maintained through a combination of economic position, educational background, cultural identification, and occupational specialization. Occupationally, status is determined by educational achievement, steadiness of employment, and the degree of professionalism required by the particular job done. Economically, wealth and assets are status determinants. Cultural homogeneity, cosmopolitanism and a Europeanized outlook are still other determinants. Finally, literacy promotes mobility from lower-class standing to middle, and the number of years spent in formal educational training helps to determine how high one can climb in the social structure.

Mexican social structure shows a trend toward increasing chance for upward mobility, especially in the urban centers. Horizontal mobility (the movement of the same class level from one set of structures to another) also takes place as the result of movement from rural to urban centers. Intermarriage, a traditional means of upward mobility in the middle class, is giving way to educational, occupational, and economic achievement. Chances for upward mobility in rural communities have been intensified through land redistribution programs and greater educational opportunities. The chances for upward mobility are greater in the cities, which helps to explain the attractiveness of the cities for rural villagers. However, some lower-class groups that have migrated to the cities have remained in the same relative status position as a result of maladjustments to urban life, population pressure in the *barrios*, and competition for the scarce jobs that they have the skills to perform.

One recent stimulus to upward mobility has been the emergence in both urban and rural areas of an entrepreneurial class. The basic stimulus for the development of this class is a change in value orientation; the incipient entrepreneur realizes that there is a better way to utilize his resources, and he seeks opportunities to do so. The entrepreneur loses the sense of rigid fatalism of traditional society; he comes to feel that the environment can be improved, and that he can manipulate it to his own advantage. The emerging class of entrepreneurs in Mexico is characterized by a willingness to work hard, a high degree of cooperation among adult members of the family, a high rate of intelligence, and a broad concern for the community. Entrepreneurial families emphasize economic activity of all members to improve their status. They tend to take interest in events outside their own communities and are particularly responsive to trends in economics and technology.

There is no class which can be characterized as conscious of its special interest as a working class. The perceived interests of memers of Mexican classes are understood in other terms, such as family onnections, land ownership, ethnic purity, and cultural values. The mportance of kinship ties far outstrips self-identification by social lass. Upper- and middle-class families define the “good child” as one who helps support the family and maintain its unity. Prestige value s placed on large families by all classes: in the interest of large numbers of interfamily relationships for the upper class, of the economic alue of children for the middle class, and for religious reasons in the ower class.

Mestizos, who make up the bulk of the middle class, tend to be somewhat more nationalist than other ethnic groups. They believe that the uture of the country is with their particular ethnic and cultural group. However, they emphasize cultural values rather than feelings of class dentification. The absence of class consciousness may be explained by wo factors: competition of values other than class absorbs too much ndividual and group attention; and desire for and possibility of upward mobility promote identification with the values of improving one's status position in the total social structure rather than with the class of which one is temporarily a member. The first factor is more mportant in explaining lower-class sentiment; the second dominates he thinking of the middle class.

The legal practice of primogeniture (whereby the father's assets, usually land, must be passed on intact to his first son) encourages second and third sons of upper-class families to seek the higher administrative and authoritative positions in government, the Church, and he military establishment. Upper-class personnel tend to dominate hese institutions. Lower-class and middle-class entrepreneurial personnel remain largely in the agricultural and small handicrafts sectors of the economy. Middle-class personnel seek positions in major business and labor organizations; the latter are closely identified with government policy makers. Small businesses are operated by lower-middle class people. The higher ranks of the educational system, especially the universities and secondary schools are staffed by upper-class and upper middle-class personnel. The rest of the school system recruits its personnel from the urban middle class.

Contacts among the social classes have grown in both numbers and complexity in the past 30 years as a direct result of modernization and the urban way of life. There is still some lack of contact between the classes in isolated rural areas; there is less common ground for cultural exchange and understanding there. More frequent contact in the cities has produced a lessening of sharp social cleavages, a trend which is likely to continue. Ethnic and racial criteria of status are breaking down in favor of economic, occupational, and educational criteria, which emphasize personal achievement. Cultural patterns are blending as the result of the operation of an assimilative educational system.

Almost all segments of the population are aware of these changes and approve of them, especially when they promise increased personal opportunities, a better standard of living, and a basis for national pride.

Among the most important factors retarding the growth of a modern social structure are: (1) disruption in ways of life and cultural values caused by migration of lower-class groups from a rural to an urban environment; (2) scarcity of jobs in the urban centers for which the newcomers are qualified; (3) inequalities in the distribution of economic assets; (4) disparities in material standards of living, cultural values, educational background, and ethnolinguistic patterns; and (5) certain popular values, which accept as natural an inequitable class system.

Dissatisfaction with the social structure has varied with time and economic prosperity. It was one of the causes of the Revolution. During the Great Depression of the 1930's, it speeded land redistribution and educational assimilation. Since the early 1940's, emphasis has been placed on the development of the private sector as an economic base from which to promote greater social mobility. These efforts have been aided by the wave of economic prosperity enjoyed by Mexico since the end of World War II. Increased social mobility appears to be a continuing trend.

There are a few groups opposed to changes in social stratification patterns. Segments of the upper class closely identified with internal economic interest resist changes in the social structure which might prejudice their position. Some external economic interests are opposed to social changes which would raise labor costs and therefore the cost of production. Opposition to population control cancels out some of the gains which would otherwise be felt as the result of modernization. Finally, middle-class Indianists oppose the absorption of the few remaining Indian tribal groups which are not yet a part of the national social structure.

CHAPTER 7

FAMILY

The significance of the family in Mexico is exemplified by its economic and social roles. The biological family is the basic unit of production and consumption, especially in rural areas. Traditionally, the father, whose occupation directs his attention outside the household, acts as the chief provider for the family. The father, as a man, is the dominant force in the society at large, as well as the dominant authority within the family unit gaining prestige from his patriarchal position. However, within the home, the mother exerts greater influence on the children because her work focuses on the household. She is in charge of socializing the children to ideal behavior patterns which reflect the values of Mexican culture. Thus, the continuity of Mexican culture is promoted by childrearing practices which expose the children to adult roles at an early age and direct children to assume increasing responsibility in the family.

Mexican society is modifying its values as a result of increased urbanization and technological development. Familial instability reflects the dynamic social order. In the urban environment, where status now depends on individual achievement rather than loyalty to the family, the father is losing his traditional authority over the children. The mother's role as an agent of socialization is being replaced in part by the school, which teaches a less traditional set of values. Like tho father, she is losing authority over the children, resulting in tension between generations in the family that reflects divergent values and role expectations.

The wife, too, is assuming a more independent role in the family. Technological innovation has decreased the time required for household duties, allowing the wife to pursue commercial activities outside the home. These, while contributing to the income of the family, may cause tension between husband and wife if the husband feels his dominant role is being challenged.

Tensions within the family are reflected by the discrepancy between the ideal and actual behavior patterns of the members. However, this instability is not reflected in all families in Mexico. Family roles are exposed to greater strain in the urban environment, while many families in small towns and villages tend to conserve traditional roles. Further, social class affects the stability of family roles in both urban and rural environments.

FAMILY STRUCTURE AND FUNCTION

Ideally, the family in Mexican culture is nuclear in structure, consisting of parents and their unmarried children. As each child marries, he leaves the parental household and establishes a new residence. Usually, a son will locate his new home in the vicinity of the parental household. Although the great majority of families are nuclear in structure, it is not uncommon for family units to include grandparents, aunts, uncles or other lineal relatives in addition to parents and their children.

The family functions as a basic economic unit and is characterized by a sexual division of labor except in times of intensive labor in rural areas, when women may work in the fields along with the men. The activities of the wife center on the household where she is in charge of child rearing and other domestic duties. In contrast, the focus of the husband's labor is outside the home in rural or urban employment. Even within the family, the division of labor is such that each member performs a separate task instead of working together on the same task.

Families are strong, cohesive units held together by bonds of loyalty, common economic goals, interdependence, stability of marriage, prospects of inheritance, and the significant absence of other social groups to which the individual can turn in time of need. Family unity and stability are perpetuated by the method of child rearing and the nature of parent-child relationships. Disruptive factors in the functioning of the family, such as adultery of one of the spouses, sibling rivalry, or favoritism of the parents toward one of the children are overshadowed by the positive attributes of the functioning unit. Nevertheless, in the urban environment, there has been fragmentation of the structure among the lower classes.

The family functions as an autonomous unit in child rearing and socialization. Cultural values and behavior patterns are transmitted from generation to generation within the nuclear family. Reflecting patriarchal dominance, the father maintains the power to sanction behavior through physical punishment. Respect and authority are emphasized in parent-child relations. Children are reared to respect and obey their parents. Responsibility to the family is important because an individual's status and security originate from the family. Often the success or disgrace of a member of the family reflects on the father's responsibility for the children. Thus, regardless of age or marital state, a son is under the father's authority as long as he remains in the household. Another example of the recognition of hierarchial powers and duties within the family is the dominance of older brothers over younger ones.

Although child rearing normally occurs within the organization of the nuclear family, the village of Tonolá in west central Mexico presents an interesting variation in family structure and function. Families in Tonolá show the characteristic nuclear structure while establishing patrifocal residence within the influence of the extended family. Traditionally, sons are given a portion of the paternal household lot when they marry. The new families live on these lots, resulting in the proximity of kinsmen. This settlement pattern influences the function of the nuclear unit. The biological family remains the basic productive and consumptive unit retaining its economic independence. However, the function of child rearing cross-cuts the boundaries of the nuclear family because of the lineal aspects of the settlement pattern. Thus, although a child's mother has the primary responsibility for his care, he is often tended by other relatives including aunts, uncles, and grandparents who are given the power to sanction his behavior. The socialization unit in Tonolá is, therefore, the three-generation extended family. This structural variation in the child rearing unit of the Mexican family reflects the cultural heterogeneity of Mexico.

Generally, relations of the nuclear family with the immediate relatives of the extended family are limited, except in the upper classes. Geographical proximity and frequency of contact are the most influential factors in relationships within the extended family. Although relations outside the nuclear family are not elaborated, the family will turn to close relations, godparents, or co-parents in times of crises.

Family structure is enlarged with the recognition of ritual kin ties in a system of godparents and co-parents. Ritual kinship emphasizes the pattern-valued behavior of respect between individuals and represents a model for social interaction at all levels. Godparents and co-parents perform economic and social functions by assisting in child rearing and providing economic help in emergencies.

RELATIONSHIPS AMONG KINSMEN

Husband and Wife Relations

The ideal role of the husband in Mexican culture is that of an authoritarian patriarch who is given the highest status in the family. He should receive obedience and respect from his wife and children as well as their services. He is expected to make all important decisions and plans for the family. The father's duties include support for the family and responsibility for each member. Complementary to the qualities of the husband, the ideal wife is characterized by submissiveness, faithfulness, devotion, and respect toward her husband. She should ask for his advice and obtain his permission before she acts on any matter. Thus, no family activity is approached on a basis of equality between the husband and wife. A wife should be industrious and frugal, managing to save money even if the size of her husband's income is small. The ideal wife is not concerned with her husband's activities outside the household. Because the ideal roles of the husband and wife are very rigid, there is variance between ideal and actual behavior in the family.

In many households, there is apparent conformity to the ideal of the submissive and devoted wife. However, the husband is rarely able to exert complete dominance over his family. The husband and wife, therefore, may disagree over the questions of authority and their respective roles in the household. In some marriages, the husband completely dominates the wife and she does not challenge his authority. In contrast to such a placid relationship, there are families in which an insecure husband becomes a domineering, fear-inspiring figure or the wife tries to dominate the family, resulting in conflict.

Attitudes of women toward their husbands reflect the discrepancy between the ideal and desired roles. While women often attest to the superiority of men and admire a man who is *macho* (having the masculine qualities of dominance and aggressiveness), they describe the good husband as one who is not too domineering. Nevertheless, they criticize women who are aggressive or resistant to their husbands although they themselves may exhibit these qualities. The completely submissive wife is regarded as a fool rather than an ideal. That women are proud of self-assertion rather than feeling guilt indicates a devaluation of the rigid cultural ideal.

It is evident that women are more in conflict with tradition in the family than are men. In fact, husbands tend to be conservative toward the traditional roles in order to maintain their control over the family.

Wives tend to reject roles which interfere with their freedom of movement and economic activities. They prefer activities which allow them to leave the home, and develop generalized hostility toward men who do not allow them outside the household. This desire may be related to the fact that pregnancy and childbirth are viewed without enthusiasm by women. Women with traditional husbands who pressure them into conforming to the ideal housewife react with frustration and a feeling of deprivation.

One source of the conflict over authority is the division of labor within the familial organization and its opposition to the ideal roles. Although the wife should be subordinate to the husband, she has greater responsibility for the operation of the household, including the care and training of the children. Because the husband is often away from the residence much of the day, he occupies a peripheral position within the family organization and his participation in household affairs is minimized. Traditionally, he is not expected to engage in any women's activities. For many men, home is where a man eats and has his other physical needs tended to. Participation in the everyday family affairs is not the man's role. The community esteems the man primarily for his actions outside the home. Ideally, he is hard-working and skilled in his profession; is responsible for community obligations; owns land; is honorable, self-controlled and good-humored in interpersonal relations; and can prove the qualities of manhood. Modesty and sexual restriction are not highly valued in the male.

The discrepancy between the ideal role of the father and his actions reflects a conflict between self-interest and family honor. Ideally, manhood in the family is represented by the father who is a begettor of sons, economic supporter of the family, and guardian of the female honor. The protection of virginity in the daughter is related to the ideal of the Church wedding when the husband takes over the role as the woman's protector from her father and older brothers. However, the domination of self-interest in manliness results in the desire for the domination of women, superiority over other men, and sexual prowess, which is channeled outside the family. Thus, individual interest of the male in himself, which is represented by the term *machismo*, goes beyond the ideal role of the father.

More significant than physical absence from the household is the behavior and attitudes of the husband when he is present. In order to gain the respect of his family, the husband avoids intimacy with the members of his household and expects them to demonstrate their respect by maintaining proper social distance. Thus, the father shows little direct affection for his children when he arrives home from work and the children will be quiet at the table while their father is eating. A result of the social distance that the husband maintains from his family is loss of control over the situation he is trying to dominate.

In many households, the husband's sense of dominance and security depends on an attitude of fear from his wife and children. He sanctions bad behavior by the use of physical punishment. The wife may be punished for actions ranging from suspicion of adultery to failure to have a meal ready on time. True to the ideal role, the wife is not expected to fight back.

Much of the husband's status stems from the fact that he is the main source of support for the family. However, women often contribute to the support of the family, detracting from the status of the husband. Technological advancement, such as the introduction of corn mills in rural areas, has shortened the hours in the household for women and has allowed them to undertake more extensive commercial activities.

Relations Between Siblings

Relationships between siblings are closest in childhood. To the age of five or six, they are constant companions in play and their interaction is not affected by difference in sex. Later, as the young girls identify with their mother and the young boys with their father, sex status becomes more important. After this divergence in roles, siblings of the same sex tend to associate with each other. Ties between siblings are weakened after marriage because of establishment of independent households and the lack of institutionalized forms of cooperation between married brothers and sisters. Disagreements between brothers and sisters over inheritance are frequent and often lead to permanent rifts in the family. The difficulty in equal divisions of property heightens conflict, as does the tendency to give more to sons, especially the favorite, than to daughters.

Godparents and Co-Parents: Compadrinazgo

In Mexican culture, kinship status is extended to nonkinsmen in the *compadrinazgo* system. This system formalizes all the relationships between godparents, their godchildren, and the child's parents. During the celebration of Church rituals, such as baptism and confirmation, a kin-like relationship, *padrinazgo*, is established between the child and his godparents, *padrinos*. At the same time, a relationship, *compadrazgo*, is created binding the *padrinos* and parents of the child as *compadres*, or co-parents.

The dual relations of *compadrinazgo* are characterized by mutual rights and duties which reflect the concept of *respeto* (formal respect). Thus, behavior and attitudes which create respect and affection while maintaining distance and avoiding conflict are reinforced. Interaction based on *respeto* emphasizes the ritual nature of *compadrinazgo* and is significant in the social structure.

The *padrinos*, who are chosen by the parents, give the child his first status by introducing him to society at the baptismal celebration. Ideally, the duties of the *padrinos* include socialization of the child in the Church. Actually, they provide a relationship in which the child practices behavior which reflects the fundamental value of *respeto*. The child learns respect for age and for ritual experience, and is encouraged to participate in other rituals which in turn reinforce the system. By becoming ritual parents of the child, the *padrinos* add the position of social relatives to their social statuses.

Like the *padrinazgo*, the *compadrazgo* adds new status and increases the total number of statuses of the individual. Satisfaction for the individual lies in the relationship of co-parents involving new rights and duties, not in the position as rank. However, there is a tendency in *mestizo* communities to use *compadrazgo* to link poor and wealthy families for the material and prestige benefits which may result; in such communities, the reciprocity characteristic of the relationship may be destroyed because the *compadres* are no longer on the same social level.

The *compadre* status is ritually celebrated at a fiesta which symbolizes the approval of society and is provided by the child's father. The reciprocal term *compadre* comes into use, overriding kinship terms and personal names. When a man is speaking of his child to a *compadre*, he says, "your child," and when speaking of his wife, says, "your *commadre*." Despite the change in nomenclature, sexual relations and marriage are prohibited within the *compadrazgo*.

The *compadrazgo* has important social functions. Any friction between parents is referred to the *padrinos* by the godchild. When in difficulty, a man turns first to his *compadre*. A man will borrow from the *compadre* rather than his relatives because a loan might result in trouble within the family whereas there can be no difficulties between *compadres*. Also, the duty to repay the family is not as binding as it is toward the *compadre*. *Compadres* may aid each other in agricultural work and house construction.

Compadrinazgo has undergone simplifications and modifications in adaptation to city life. Generally, only godparents of baptism and marriage are established; by contrast, in rural areas godparents are ritually appointed for every minor event. In the city, family ties are reinforced by the selection of relatives for *compadres*, whereas indigenous peoples usually choose non-kin. Thus, the flexibility of the *compadrinazgo* system allows it to function in both rural and urban contexts.

Of the two sets of relationships in the *compadrinazgo*, the *compadrazgo* is the more important for it continues throughout life. In contrast, the duties of the baptismal *padrino* tend to weaken after the marriage of the child. There is asymmetry in the relations between *compadres* as more respect is given to the *padrino*. The speech and attitude of *compadres* reflect the quiet reserve of *respeto*.

Compadrinazgo brings separate families together in formal, kin-like relationships. Terminology approximates but does not parallel that of the kinship system, for it ignores generational variations. The *padrinazgo* mirrors the nuclear family in terminology and partially in function. It supports the child with affection through benevolent and unquestioned authority. By exemplifying the desirable, it socializes the child into the behavior patterns of the culture. It also functions to mitigate strains within the family and provides economic help in times of crises.

CHILD REARING

Because of the social heterogeneity of the population, there is much variation in the training and care of infants. Factors such as social class, cultural background, and urban or rural residence influence methods of child rearing. The younger generation is spending more time in school, which is greatly affecting the traditional period of apprenticeship in the fields or the household. Unfortunately, there is a dearth of information concerning the influence of urbanization on the life cycle of the child. Thus, much of the information is limited to description of the rapidly changing rural customs of child rearing.

Pregnancy and Birth

Because children are viewed as a natural consequence of marriage, a failure to have offspring is thought of as a great misfortune. A large family is a source of pride, status, economic security, and emotional satisfaction for the parents. Although sons are more valued than daughters, a balance in the sex of children is desired so that both parents will be helped in their work. Thus, the value placed on children results in marital conflict when a woman is barren. The only approved method of limiting the number of pregnancies is to abstain from intercourse as long as possible after the birth of a child.

In rural areas, care during pregnancy may consist principally of massages of the wife's abdomen by a midwife who is hired by the husband to take care of the wife during and after pregnancy. The purpose of the massage is to make birth easier and to determine the position of the fetus. The midwife also advises the pregnant woman concerning self-care. The wife is told that she should not lift heavy objects although she should continue to work in order to make delivery easier.

In traditional villages, a pregnant woman may observe ancient taboos such as avoidance of viewing an eclipse, abstention from intercourse, the satisfaction of food cravings, avoidance of cold things, and avoidance of selfishness toward one's neighbors. There is no period of seclusion during pregnancy although social participation is slowly narrowed.

Midwives attend the birth although a doctor may be called in for a difficult labor. Labor may last for several days. The midwife uses traditional methods to speed the birth.

After birth, the new mother is the focus of unusual attention. She is allowed extended bed rest, freedom from household chores, and abstention from sexual intercourse. Poor families, however, cannot afford extended care of the mother.

The introduction of the child into society occurs soon after birth at the baptismal celebration when the obligations of the *padrinos* begin. The godparents are responsible for teaching the child cultural values, seeing that the child attends school, and sanctioning the child for his behavior. As the child grows, the parents may ask for the *padrino's* advice relating to the child. In some cases, if the parents die, the godparents may care for the child. If the child dies during infancy, the *padrino* pays for the funeral and burial.

Infancy

Infants often sleep with their mothers. Throughout the nursing period, which may last for several years, the baby receives attention and affection from all members of the household. Although walking and talking at an early age are received with excitement, the baby is not hurried in his development. A healthy baby should walk by the time he is one year old and talk by the time he is two.

A first born child or a child of a more modern or urbanized family often receives different treatment than other children. The parents are more indulgent and affectionate toward favorite children. They are not carried after they can walk and play where they wish. These children have more opportunity to exercise initiative and develop individuality.

Beginning at weaning, the transition from infancy to childhood culminates at the birth of the next child. Younger children may be jealous of a new baby because of this loss of affection, and the displaced child often becomes irritable and hypersensitive. If he has a tantrum while the father is at home, he may be spanked, although he is often given what he wants.

From infancy, children are taught to be quiet, passive, and unobtrusive. Parents reinforce this behavior in the child because it is thought that a child who is badly reared will not be an industrious worker and will get into trouble. Such a child would reflect ill upon his parents and would bring shame to the family.

While both parents are socially responsible for the care and behavior of their children, the mother bears most of the responsibility of child rearing in the home. She is expected to teach them good habits and behavior patterns and to supervise their religious training. Because family life focuses on the mother, the children turn to her for assistance, permission, information, protection, and affection. The father depends on the mother to maintain his position of authority and respect in the home. She must teach her children to avoid angering or offending the father and serve as an example of respect for his authority.

Rural Childhood

Between the ages of two and five, children lead relatively carefree lives, devoting themselves entirely to play. Mimicking his parents, a boy will pretend his dog is a burro and load it with sticks of wood. At this age, young boys and girls play house together. The boy may scold his "play wife" for not being efficient at her household tasks. Thus, the children begin to learn behavior patterns which they will practice in real situations later in life. During this period of early childhood, older children are responsible for the safety of their younger brothers and sisters and are punished if their siblings complain about roughness.

After an early childhood characterized by permissiveness, the father begins to employ authoritarian methods of control. The patriarchal family pattern is reflected in child rearing as the father begins to use physical punishment to sanction behavior. Between the ages of five and twelve, physical punishment is reserved for the most serious offenses.

Traditionally, at the age of six or seven, children begin to assist their their parents. From the attitudes of indulgence and lenience practiced during infancy, the parents shift to the expectation that the child will apply himself to learning behavior patterns that lead to adulthood. The father assumes the new role of teacher in the life of his son when he takes the boy out to the fields with him. Most boys look forward to this new responsibility and enjoy the work. In turn, the father is proud of his son and shows great patience in teaching him. At this time, relations between mother and daughter are close. She instructs her daughter in the skills of running a household. Mother and daughter continue working together until the daughter is married. Gradually, the daughter identifies with her mother as she assumes the mother's role in the house. The mother's attitudes toward her work, childbirth, and childbearing as well as toward men and marriage become the daughter's attitudes. The traditional division of labor in the family strengthens the mother-daughter and father-son relationships during late childhood as the children begin to learn adult roles and attitudes.

A rapidly rising percentage of children now attend school during their childhood (see ch. 9, Education). Because school attendance begins at the age of six, the traditional apprenticeship in adult roles is being interrupted. New values taught in school and reflecting urban influence may conflict with parental attitudes. School socializes the children into a wider group of friends, stressing cooperation in team activities. Most girls view school as a period of freedom from their elders. In contrast, boys feel confined in the classroom and are eager to join their fathers in the fields. In rural areas, parents will permit their children to stay home and help during periods of intensive work.

Adolescence and Courtship

Adolescents are given increasing responsibility in the family organization. In preparation for marriage they assume adult roles, achieving greater status and security in the family. However, their position is limited to directing the activities of the younger children rather than challenging the authority of the parents. Adolescents who work for the parents instead of continuing their education become an economic asset to the family.

There is an increasing divergence in the ideal behavior patterns for boys and girls during this period. For girls, life is characterized by increased confinement, personal restriction, chaperonage, and the fear and excitement of courtship. Contrasting to the restricted life of the girls, boys are allowed greater freedom and receive more respect from their parents. Courtship provides a source of social satisfaction for the young men.

In rural areas, adolescence begins at twelve or thirteen when girls are withdrawn from school to assist their mothers in the household. The mother-daughter relationship during this period is most significant for the female adolescent. The mother may retire from many of her heavy household duties, shifting the burden to the daughter while assuming the role of director rather than co-worker. The mother not only supervises the daughter's activities within the household, but also teaches the girl the ideal behavior patterns governing interaction with men. The daughter is warned that boys are dangerous and often damage a girl's reputation and bring disgrace to the family. After menstruation occurs, the mother reinforces the ideals by limiting the daughter's interaction with males. The girl is not supposed to leave the home alone, although her duties often require her to do so.

A girl who remains in school during adolescence plays a minor role in the household. Her actions are less restricted and she is allowed more leisure time with friends. Although she may never use her education in an occupation, the girl will have higher status than her less-educated peers. Educated girls will often have to marry late because of the difficulty in finding a suitable husband.

In contrast to the mother-dominated or directed environment of the household, boys are co-workers with the father. A boy works to perfect the skills which will enable him to support his own family after marriage. The middle-class adolescent also prepares for the future by seeking secure employment before considering marriage. He does this to prevent dependence on a working wife who might threaten his authority in the family.

With the exception of courtship and elopement, there is an absence of open revolt against parental authority and tradition during adolescence. However, conflict in the parent-sibling relationship occurs when youths who have studied outside the community return with new values. The desire for more freedom from parental control may result in conflict with parents who feel that the younger generation is questioning their authority.

In the past, when a boy reached adolescence his relatives selected a bride for him. Often a matchmaker or godparent would act as an intermediary between the two families in arranging the marriage. However, parental authority in arranging marriage has broken down and the traditional pattern is restricted to a few Indian villages. Schooling, which permits interaction between adolescents of opposite sexes, has postponed the ideal age for marriage, and a period of courtship has developed. Now when a boy decides to marry, he directly asks the parents of the girl.

Many parents frown on courtship practices, which range from the traditional flirtation in the town square and the chaperoned dating of conservative communities to the unsupervised dates of the city. They are unhappy when the daughter formalizes her friendship with a boy by becoming his *novia*, or fiancée, for it is feared that the relationship will result in the loss of virginity for the girl before marriage.

Courtship in the middle class shows the difficulties of maintaining the conflicting ideal roles of male and female adolescents. The future wife should remain a virgin while the male is expected to maintain his *macho*, or manliness. A middle-class male may choose a *novia* of fourteen or fifteen, although he may be 5 years older. Having a young *novia* who is physically and psychologically immature allows the young man to train his wife according to his tastes and assures that she has never had interest or experience with other males. As this engagement relationship (*noviazgo*) may last for several years, it is thought that the *novia* will have an adequate opportunity to form his future wife's personality.

During the *noviazgo* the girl is the focus of much public attention and courtesy from her *novio*. The *novia* is courted with traditional music and letters, attesting to her beauty and the great need the *novio* has for her. Ideally, their courtship proceeds without the *novia's* fear of being compromised, for she should be acompanied by a chaperon at all times. Chaperons are common in small towns and in traditional families even in Mexico City. Naturally, they severaly limit physical demonstration of affection between the young man and his future wife.

The function of the chaperon is to perpetuate the ideal role of the woman in courtship and marriage.. Traditionally, a middle-class girl is taught that she can encounter fulfillment of her womanhood only as a wife and mother. She is also instructed that a middle-class male will only marry a girl who is chaste, refined, and dignified. The chaperon functions to maintain the girl's reputation, reflecting the belief that sexual attraction will result in the loss of the girl's virginity if she is left alone with her *novio*. Since parents are eager for their daughter to make a good marriage, they guard her reputation.

For the young man, courtship is a period of conflicting roles. To maintain his manliness, he must satisfy his sexual drives. However, he should also adhere to the cultural ideal of marrying a pure and chaste girl. He may resolve this conflict by seeking physical satisfaction with a prostitute while maintaining the idealized relationship with his *novia*. The double standard of his actions leads to acceptance of a dichotomy between good and bad women. Thus, the young man ideally loves and will marry a virtuous girl. However, he must avoid thinking about her in sexual terms. In contrast, women who are available for sexual relationships are placed in the bad category and are not worthy of love. This double standard is maintained in a modified form after the marriage.

The chaperon makes the relationship between the *novio* and *novia* artificial because interaction occurs only in socially correct situations. Communication between the future man and wife is inhibited by the presence of the third party and the young woman is forced to romanticize the relationship.

Formalized courtship does not prepare the *novia* for the reversal of roles which occurs after marriage, when the male begins to dominate the relationship and the woman is ideally submissive, industrious, and self-sacrificing. Nor is she prepared for the change in focus of the husband's attention to the world outside their relationship in the household.

Among the urban poor, individual interests dominate concern for family honor, resulting in a discrepancy between ideal and actual behavior during courtship. In contrast to the rural village, where status is determined by the close-knit community, status is achieved by individual effort in the urban environment. Corresponding to this contrast in status is the shift in male attitudes from interest in family honor to status concerned with individual achievement of manliness. This shift in attitudes accounts for the variation between the feminine ideal and actual behavior of women. Virginity at marriage becomes an ideal that is rarely attained. Although men are aware of the ideal, neither the absence of virginity nor the presence of children from a former husband presents on obstacle to courtship and marriage. Naturally, as interest in manliness (*machismo*) reflects self-interest, its expression is possible only when traditional morality is not observed. A decline of family honor, because of the emphasis on self-interest, results in a weakening of family structure and leads to female emancipation from the ideal.

Marriage

Girls and boys have different conceptions of the ideal marital partner. In selecting a wife, boys generally choose a girl for romantic reasons, beauty, or personality. In contrast, girls tend to be more realistic in selecting a husband and may refuse to marry a boy who drinks, pursues women, shows violence, or is irresponsible in his work. Status factors are important in the selection of a partner. In order to establish a position of authority and dominance in the family, a boy looks for a girl who is poorer and less educated than he is. Girls, on the other hand, desire to improve their economic standing through marriage. As a result of these attitudes, the daughter of a wealthy family may have difficulty in finding a suitable husband. High status women tend to marry more educated men from outside the community, contrary to the general pattern of endogamy in Mexican culture.

When a young man decides to marry, he may go directly to the father of the girl to ask for the consent of her family. If the girl and her parents agree to the marriage, plans for the wedding are made. Parents or godparents may act as intermediaries between families if the girl's parents oppose the match. Both sets of parents warn the couple of the seriousness of the union and the responsibilities of beginning a family.

The couple may elope if the parents continue to oppose the marriage. If the girl consents, the couple goes off and lives together as man and wife for a few days at the house of a close relative or friend. A formal wedding is arranged when the parents recind their initial decision. The growing number of elopements in Mexican culture is symptomatic of a breakdown in parental authority and an increasing independence of the younger generation.

If the marriage is celebrated in the Church, the ceremony follows the traditional Catholic ritual. The parents appoint marriage *padrinos* who pay for the ceremony, which is becoming increasingly costly. At the wedding ceremony, the *padrinos* act as intermediaries between the two families, exemplifying the importance of respect relationships.

Although marriage marks an important transition in the roles of the young adult, the couple does not achieve the status of adulthood until a child is born and they assume parental responsibilities.

There are three kinds of marriage: civil, Church, and free union. According to the 1960 Census, 79.82 percent of the marriages were formally celebrated, 15.02 percent were of the free-union type, and 5.16 percent were not categorized as to type of union. Of the formal marriages, 20.56 percent were civil unions, 11.57 percent were celebrated in the Church, and 67.87 percent were sanctioned by both Church and civil authorities. Of the three kinds of marriage, only civil marriage is recognized as legal by the Mexican Constitution. Although Church marriage has the greatest prestige and is thought to be the only valid form of marriage by the older generation, fewer young people are being married in the Church, reflecting an increasing tendency to conform with Constitutional law.

When a man and woman cohabit without Church or civil sanction, the marriage is termed a free union. Although free union is not a legal form of marriage, it is not uncommon, especially in second marriages. The informal marriage establishes no contractual bonds. However, civil authorities have recognized the partial right of inheritance by the woman if the couple has lived in monogamous union for 5 years preceding the death of the husband, and if the woman has borne the man's child or children. Census statistics, which may be unreliable, indicate that free union has decreased from 23 percent of the marriages in 1940 to 15 percent in 1960. Generally, this practice is more common in rural districts and more frequent among the younger generation. Although many free unions are later formalized, the widespread conditions of informal marriage reduce the stability of family organization. Because desertions and remarriages are frequent in informal unions, one man may head several households with children in each.

According to civil and Church authorities, the children of the illegal free union are illegitimate. Nevertheless, in both urban and rural environments these marriages are socially acceptable and the children are regarded as illegitimate only if they are not recognized or supported by the father. Civil law allows children born to unwed parents legitimate status if the parents are later married. Most children who are legally illegitimate are born of free unions or religious marriages not accompanied by civil ceremonies; illegitimate children born of casual relationships are not significant in numbers.

The spatial distribution of high frequencies of free union and illegitimacy is greater in the northern and southern regions of Mexico, while the central region shows a mixed pattern. The prevalence of free union and illegitimacy is greater among the poor, the rural, and the Indian population. The slow diffusion of new behavior patterns and the conservative attitude of the rural and poor populations result in the maintenance of older customs, which have been abandoned by the middle and upper classes. Nevertheless, the decrease in the proportion of illegitimate births in recent decades reflects the increased acceptance of official morality. Increasing educational opportunities, declining rates of illiteracy, and migration of people to urban centers is speeding the diffusion. Other factors such as the prerequisite of stable families in qualification for low-cost housing and installment credit have influenced this trend in the urban context.

Divorce and Separation

Informal separations occur more often than formal divorces. A man may leave his wife because he finds another woman more attractive; a woman may leave her husband because he fails to support his family. Separations occur most frequently in the free union because there is no contractual bond unifying the couple. If a man has been married by the Church, he will be hesitant to leave his wife, preferring to have an affair outside the household than to divorce the wife. Marital stability is also ensured by the regular birth of children in the family. When a separation occurs, the children remain with the mother, who usually joins the household of her father or another close kinsman. Reconciliation efforts are made by the marriage *padrinos*.

Old Age and Death

In rural areas a person is considered to be old when he can no longer perform his share of work and shows physical signs of aging. Retirement to a life of rest and leisure is uncommon because everyone works as long as he is able. This custom of useful activity keeps the elderly from becoming a burden to their children, who have an obligation to care for their elderly parents.

The ownership of property, which provides income with little or no work, is the best security for old age. Thus, parents delay the division of property among the children until after death. This gives them continued authority over their children.

Death, which some prefer to useless old age or chronic illness, is viewed as natural and inevitable. There is no attempt to protect children from the sight of death. The death of an old person or an infant causes relatively little disturbance. However, the death of a parent or adult in the prime of life is considered a serious loss. Burial usually occurs within a day of death because embalming is rare. A Catholic wake is celebrated to mourn the deceased. The funeral is presided over by a priest who offers prayers for the deceased. Women carrying lighted candles lead the funeral procession followed by four men bearing the coffin. The procession may visit the church on the way to the gravesite where additional prayers are said and the coffin is buried.

For the Catholic, the *fiesta* during the Day of the Dead symbolizes the idea of a better life through death and a lack of acknowledgement of actual physical death. During the *fiesta* celebration, the usual roles of social interaction and distinction of wealth or social class are ignored because death brings equality to all men. To the Mexican, death has a mystic fascination which is illustrated by the widespread use of the skeleton in folk art.

CHAPTER 8

LIVING CONDITIONS

Mexico is moving toward its economic and social goals. The Republic has a growing middle class which is able to purchase the necessities and material items associated with a relatively high standard of living. However, the lower income groups remain close to a subsistence level. It has been estimated that three out of five families have a monthly income which is about Mex $480 (Mex $12.50 equal US $1.00) and that one in five earns less than Mex $192 per month. But these figures do not allow for growing one's own food not for bartering.

Income levels place Mexico in the upper range of developing countries. While inflation has conceled part of the gains in income per capita, an average annual increase of over 6 percent since World War II, food prices have gone up only 1.8 percent for the early months of 1968 as compared to 2.7 percent for the comparable period in 1967.

The high birth rate has remained stable, but the death rate has continued to decrease. This is producing a rapid growth of population. This, in turn, is causing problems in maintaining or increasing the quality of living for growing numbers of people. Poor living conditions are most acute in urban areas where natural population increase is being compounded by the growing influx of rural people in search of employment.

The government has organized programs designed to improve living conditions in cities by constructing low-rent community developments as well as by selling food and clothing at discount prices to the urban poor. The 1968 budget provides Mex $3.8 billion for health, medical care, and hospitals and Mex $8.9 billion for welfare and social security, all out of a total budget of Mex $61 billion.

The government continues to wage campaigns against malnutrition, a major contributor to the high infant mortality rate. Although medical care is being provided to larger numbers of people than in the past, there is a serious shortage of professional and auxiliary health personnel. In rural areas physicians and nurses encounter a folk interpretation of illness, diagnosis, and treatment which often conflicts with modern medicine.

Nearly all Mexicans enjoy a large number of religious and patriotic holidays occasioning *fiestas* and other celebrations. Both spectator sports and more active recreational forms are increasing together with a growing availability of parks, museums, theaters, and stadiums.

HEALTH

Major Causes of Death

The proportion of deaths in infancy and early childhood is an important index of health problems. In 1964, 45.5 percent of all deaths in Mexico occurred among children under 5 years of age. The principal causes of death for this age group include diseases specific to early infancy: gastritis, enteritis, and related diseases; influenza and pneumonia; bronchitis and respiratory disease; and measles.

Recent declines in mortality are greater for children 1 to 4 years of age than those in infancy. Child mortality has decreased from 30 deaths per 1,000 children in 1953 to 15 deaths per 1,000 children in 1962. Infectious and diarrheal diseases are the leading cause of death for this age group. Many of the children who die of these diseases have a complicating malnutritional condition. The recent reduction in mortality among children is a result of continued improvement in environmental conditions, promotion of preventive medicine and increasing availability of medical services.

Following senility and ill-defined and unknown causes, the principal causes of death in 1964, and their percentage of all deaths, were influenza and pneumonia (13 percent), certain diseases of early infancy (12.2 percent), gastritis, enteritis, and related diseases (10.8 percent), accidents (4.6 percent), and heart disease (3.8 percent). Common communicable diseases which may cause death but more often result in temporary disability, include measles, whooping cough, amoebic dysentery, gonorrhea, syphilis, tuberculosis, typhoid and paratyphoid fevers, and infectious hepatitis. Other major communicable diseases are diphtheria, infectious encephalitis, leprosy, malaria, acute paralytic poliomyelitis, and tetanus.

The rates of death from infective and parasitic diseases as well as gastritis, enteritis, and related diseases show a steady decrease in recent years as a result of increasing facilities in preventive and curative medicine. For infective and parasitic disease, the death rates per 100,000 population have decreased from 208.3 in 1956 to 99.5 in 1964. Deaths from gastritis, enteritis, and related diseases parallel this tendency, decreasing from 159.9 per 100,000 in 1956 to 111.2 in 1964, or a reduction in the percentage of all deaths from 13.6 to 10.8 percent during the same period.

From the mid 1950's to mid 1960's, there has been a slight, but continuing, tendency toward a shift from infectious diseases as the principal cause of death to cancer, heart disease, and accidents as major causes of death. In 1964, deaths per 100,000 population were 37.7 for malignant neoplasms, 39.5 for heart diseases, and 47.8 for accidents.

Medical Personnel and Hospital Facilities

In some cases health statistics are incomplete because the reporting of disease and vital statistics depends in part on the availability of medical and health services. As health programs become more extensive, improvement in case reporting and medical certification of death will occur. The development of health programs for the control of disease requires trained medical personnel and hospital facilities throughout the country.

Improvement in the training of medical personnel has occurred with the establishment of specialized programs in administration, infectious disease and epidemiology, public health and nutrition. Increasing numbers of auxiliary personnel are being trained in public health to supplement the relatively low number of physicians. In 1962, 12 physicians per 10,000 population practiced in the capital and large cities, whereas only 5 physicians per 10,000 serviced the rural portions of the country. The Republic's 23 medical schools were graduating 1,079 new doctors each year; however, in 1965, the average of 5.2 physicians per 10,000 population reflected only a small increase in the proportion of physicians relative to the rapidly growing population. A total of 2.2 graduate nurses and 9.8 nursing auxiliaries per 10,000 population assisted physicians in public and private health care. In addition to 21,165 physicians and 8,252 nurses, there were 3,250 dentists and 40,000 nursing auxiliaries serving the Republic in 1965. Hospital facilities are more numerous in urban than in rural areas. In 1962, 1,925 hospitals, including 415 for maternity and 28 for pediatrics, serviced the population. Three times as many hospital beds were available to urban inhabitants than were accessible to rural populations. The availability of these facilities has increased the number of successful deliveries conducted by doctors or qualified midwives to over 500,000 in 1964. In the same year, 12 percent of the population made use of health facilities including hospitals and clinics.

Programs for Health Improvement

The Ministry of Health and Welfare is in charge of the protection and improvement of health in Mexico. The general duties of this governmental organization include the promotion of preventive and curative medicine, the improvement of the physical surroundings at home and work for the individual, the organization of health education for the public, and the collection of medical statistics. The Ministry has organized specific programs for the prevention of epidemic and endemic diseases, the construction and maintenance of hospitals as well as maternity and child welfare centers, and the development of additional water and sewage systems.

Campaigns against disease have focused on malaria, typhus, diarrhea, tuberculosis, leprosy, onococerosis, pinto disease, poliomyelitis, goiter, and venereal diseases. In 1956, when 2 million people were being attacked by malaria each year, a special government corporation was established. The goal of the corporation was the spraying of the walls of every home in every locality in the malarial areas of Mexico. The public health workers had to work within a serious time limit in order to wipe out malaria before the mosquitos which transmitted the disease became resistant to the DDT and Dieldrin being used to spray them. This program was coordinated with the Ministry of Education, which prepared pamphlets in Spanish and common Indian languages to explain how malaria is transmitted and why spraying leads to its eradication. There was some resistance in rural areas to the program because it was unfamiliar and contrary to their folk beliefs, but it began to gain the interest of rural inhabitants when they discovered that spraying killed many of the other insects which infested their homes.

Other nongovernmental agencies, including the Catholic Church, the University of Mexico, the National Lottery, and the United Nations Children's Fund (UNICEF), contributed to the malarial control program. The cost of the 3-year campaign was about Mex $31 per dwelling, or a total of Mex $300 million. UNICEF contributed one-third of the cost in the form of supplies and the Ministry of Health paid the other two-thirds. The success of this coordinated effort is evident, for malaria which was the leading killer in Mexico at one time has been eradicated from all but a small portion of the areas in which it was endemic. The government announced that between September 1963 and 1964, no Mexican died of malaria, affirming the success of the program.

Vaccination programs have been organized against smallpox, whooping cough, diphtheria, and tetanus. Between September 1963 and 1964, the Ministry of Health and Welfare administered 23 million immunizations, including 500,000 smallpox vaccinations. Oral vaccinations against polio have been obligatory for children since November 1963, and 75 percent of the 6-year-old population have been immunized.

The National Institute for the Protection of Infancy plays an important role in the welfare of infants and pre-school children. The National Institute has organized over 100 educational centers, teaching first aid, sanitation, sewing, cooking, and principles of nutrition. Health services are offered to expectant mothers, infants, and preschool children. The National Institute distributes three million breakfasts daily to children in the primary grades, supplementing a similar program administered by the Ministry of Health and Welfare.

In 1963, the Ministry of Health and Welfare created a planning directorate, which is responsible for the organization and implementation of 6-year health plans. The goal of the 1965 to 1970 health plan is the maintenance of the programs for eradication of such diseases as smallpox and malaria. Efforts are being focused on the eradication of endemic and epidemic diseases. The plan is continuing earlier vaccination campaigns against typhus, polio, tuberculosis, whooping cough, diphtheria, and tetanus. Additional programs have been initiated for the control of onochocerciasis, rabies, leprosy, venereal diseases, endemic goiter, and rheumatic fever.

In 1965, government agencies spent a total of Mex $2.8 billion on health programs, representing 7.5 percent of the total governmental expenditures. The Ministry of Health and Welfare spent Mex $900 million while the Social Security Institute spent Mex $1.9 billion. The per capita health expenditure in 1965 was Mex $68.50.

Folk Medicine

Folk medicine has been influenced by a combination of Spanish, Indian, and modern concepts of illness and curing. In the 16th century, Spanish priests treated sick Indians and taught them the Hippocratic theory of disease which was current among Spanish physicians at that time. The Hippocratic theory stated that all substances were composed of the elements of earth, air, fire, and water, and possess the corresponding qualities of cold, dry, hot, and wet. In this system, the qualities of cold and hot, as well as wet and dry, were antipolar. Normally, a body maintained a state of equilibrium in terms of these oppositions; however, when one of the qualities established dominance the body became ill. To restore balance to his system, a sick individual consumed foods and medicines which possessed qualities opposite to those produced in his body by sickness.

Folk medicine in Mexico has selectively assimilated much of the Hippocratic theory, maintaining the concept of the equilibrium in the healthy body while ignoring the dry-wet distinction in favor of the hot-cold dichotomy. To this theory, the Indians added a strength-weakness contrast and a belief that strong emotions cause disequilibrium in the body.

In rural and many urban areas, an individual's health is believed to be threatened when the natural equilibrium between heat and cold is upset by the concentration of one of these qualities in a specific portion of the body. To restore the equilibrium, folk medicine focuses on combating the dominant quality by administering its opposite. Foods, beverages, herbs, medicine, animals, and humans are characterized by a quality of heat or cold. Sometimes actual temperatures are thought to be involved, as when an individual becomes overheated by the sun or chilled by contact with water. However, more commonly the qualities of hot and cold are considered to be innate characteristics of a given substance.

The human body strives to maintain even heat unless it is attacked by stronger outside sources. Heat may overwhelm the body following exposure to high temperatures of the sun, warm bath water, or radiation from a fire. Heat may also affect the equilibrium of the body as a result of a strong emotional experience such as anger, fright, envy, or joy. Other sources of heat include excessive consumption of hot foods or drinks and the emanations given off by a corpse. Cold attributes enter the body in the form of winds or airs, calles *aires*, which affect the head and upper torso. Other sources of cold include water, contact with iron or steel and careless consumption of cold foods and drinks.

Strength and weakness are another set of forces which are believed to attack the equilibrium of the healthy body. Weakness is inevitable in infants and children as well as people who are already sick from other causes. The most common illness thought to be derived from weakness in children is *mal ojo*, or evil eye. The symptoms of *mal ojo* include nausea, fever, diarrhea, and prolonged crying. According to folk belief, anyone who is characteristically strong or temporarily strong or hot can cause *mal ojo* by touching or being near to the victim, although his intent is not malevolent.

Blood is considered to play a significant role in health and illness. An individual's condition is often described in terms of whether his blood is strong or weak, hot or cold. A person with strong or rich blood is thought to enjoy great vigor and good health, whereas the person with weak or thin blood is usually unhealthy. Normal blood may be weakened by exposure to evil winds or cold substances.

Knowledge of the interior functions of organs in the human body is very general and imprecise. Intruded objects, *aires*, and other disease-producing substances are thought to circulate inside the body with little restriction. The treatment for intruded objects includes sucking them out from the place at which pain is localized.

Acceptance of modern medical practices depends to some extent on their ability to be incorporated into Indian theories of illness. Many patented and commercial medicines and some modern treatments by physicians have been interpreted as being within the hot-cold conception of disease and the maintenance of equilibrium within the body and incorporated into folk medicine. Other practices have been rejected because they conflict with prevailing beliefs. Indians who believe that disease is caused by supernatural forces or violations of the hot-cold principle cannot accept the modern belief that disease is caused by germs.

Folk medicine is practiced especially in rural areas. From an Indian and *mestizo* viewpoint, physicians are ignorant of many of the diseases, such as bewitchment and evil eye, which threaten the health of the individual. When physicians find nothing wrong with individuals who believe themselves to be suffering from these maladies, some rural dwellers question the powers of modern medicine. On the other hand, if traditional medicine fails to cure an illness, the aid of a physician will often be sought. However, the greater expense of modern health care usually limits its use to the most serious illnesses.

Folk medicine divides illness into two categories: natural or God-sent afflictions and unnatural or sorcery inflicted ones. Natural illnesses are attributed to ordinary causes such as the destruction of the hot-cold or strength-weakness equilibriums in the body. There is a limited awareness of the infectious nature of some natural diseases. In contrast to natural diseases, unnatural diseases may be caused by the evil eye, fright, or witchcraft.

Belief in witchcraft as a cause of unnatural diseases is common, especially in the countryside, although practice varies. Devices believed to be used by witches to cause illness include the sending of the witch's *nagual* (transformation in the form of an animal) to make an individual ill, intrusion of foreign objects, imitative and contagious practices, and strength to cause the evil eye.

Another volitional being to which illness is ascribed is the ghost. In some areas, ghosts are believed to send sickness to their living relatives as punishment for neglect of proper funeral ritual, which is a social obligation. The ghosts of people who die from violence play a more malevolent role, attempting to kill others in the community in order to liberate themselves. In comparison to the elaborate role which witches play in folk medicine, ghosts are viewed as a minor cause of illness.

Many of the practices of preventive folk medicine focus on maintenance of a balanced diet and conditions of heat and cold, conforming to the concept of equilibrium. Excessive eating may cause parasites and high sugar intake may produce symptoms of diabetes. After strenuous activity or exposure to the sun, a person avoids becoming chilled. Prevention of unnatural diseases requires careful social conduct. Thus, in the case of evil eye, a child's weak qualities cannot be changed; however, preventive medicine protects the child from strong people, especially strangers.

When preventive measures fail and an individual becomes ill, he makes a self-diagnosis of his discomfort, applies a home remedy such as an herbal tea, and restricts his activities. In the initial stages of illness, no complex analysis of causes is attempted aside from simple ascription in terms of the immediate past. Wounds, brief emotional experiences, and chills are handled directly by the patient and his family. However, if the illness continues to disturb daily activity, the individual consults a *curandero* (native curer) who prescribes herbs or other treatments. In some cases a doctor from a nearby health facility may be consulted. Curers are grouped into two categories: the specialist, who limits his practice to certain situations, and the socio-ritual curer, who is concerned with the socio-psychological aspect of illness as well as the physical symptoms. Specialists include mediums, midwives, massagers, egg rubbers, herbalists, physicians, surgeons, bonesetters, pharmacists, and witches. However, because of their spiritual powers, these curers may be feared as being witches simultaneously and are avoided except in serious cases. Education and public health programs have gone far in reducing the incidence of infectious diseases, and there has been a growing acceptance of spraying, vaccination, and other modern medical practices as reinforcing and at times, supplanting traditional methods in the rural areas.

WELFARE

Social security benefits for workers in private industry and governmental service are helping to offset low incomes (see ch. 21, Labor). The function of social security traditionally operates within the family unit (see ch. 7, Family). Since 1943, the government has taken over this function in many areas. The Mexican Social Security Institute administers an insurance program which in 1966 covered 7.2 million persons as compared to 2.5 million in 1958. Between 1958 and 1964, the Institute administered 135 new medical units, including 84 in rural areas, built 74 social security centers and organized 45 clubs for juveniles with classroom and work shop facilities.

Under the social security program, which is financed with employer contributions, workers are protected against the risks of occupational accidents and disease, general sickness, and old age. Medical care is furnished in addition to two-thirds of the daily wage during incapacities of up to one year. In the event of death, funeral expenses are paid, and the widow continues to receives 35 percent of the wage and children receive another 20 percent until the age of 16. Workers who have contributed at least 3 years are eligible for an invalid's pension; after contributing over 9.5 years, workers are eligible for old-age pensions after retirement at the age of 65. Widows of pensioners continue to receive 40 percent of the pension (see ch. 21, Labor).

The Mexican Social Security Institute also administers low-cost housing projects; educational programs in hygiene and sanitation, arts and crafts, as well as recreation and sports; and medical services and research projects. Governmental employees are given additional benefits in health, rents and loans, and life insurance by the Social Security Service Institute for government workers.

FOOD, CLOTHING, AND HOUSING

Diet, dress, and housing, which show the varying influence of Indian, Spanish, and modern western technology on Mexican culture, are important indicators of the standard of living. With rapid population growth and migrations to already crowded cities, inadequate diet, dress, and housing continue to threaten the health of poor Mexicans. The government and international agencies are focusing their attention on improving the nutritional level of the population's diet, providing low-cost food and clothing, constructing low-cost housing, and making water and sewage systems available to a greater proportion of the population.

Diet

While corn, beans, and chile dominate the diet of the Mexican, the proportional consumption of these basic foods varies by season, income, and food habits of the family. The diet of low-income families consists almost solely of the starchy staples. Thus, the consumption of corn, which is the major staple, in the form of tortillas, ranges from 10 to 70 percent of the family diet. The diet is supplemented by varying amounts of other foods including meats, vegetables, and fruits, which are either locally grown, gathered wild or purchased in stores or the market place. The best eating occurs just after the harvest in rural areas or on fiesta days when *mole*, which is made with chicken or turkey, rice and beans, is served.

According to the World Health Organization, the average Mexican consumes 1,985 calories, 21 percent fewer than recommended by nutritionists. Thus, the problem of inadequate nutrition is compounded by insufficient food intake resulting from the general low economic level of the population, lack of an efficient distributional system and lack of persons technically trained to ensure an abundant production for the growing population. It is estimated that caloric intake will increase to 2,727 by 1975. However, more significant than the lack of calories is the lack of proteins which causes such diseases as kwashiorkor, particularly among children aged one to four. Kwashiorkor is characterized by swelling of the child's belly, development of open sores, and discoloration of hair and skin.

To improve the diet of the general public, the government has organized stores through the National Food Company (Compañía Nacional de Subsistencias Populares—CONASUPO). This corporation distributes food to low income groups at discount prices. To solve nutritional problems, the corporation offers packets of 14 basic foods designed to last a family of five for one week at a cost of Mex $35. La CONASUPO also improves the income of the rural population by guaranteeing farm prices, storing surpluses of basic foods including corn, wheat, beans, and rice, regulating the price of staples, and selling foods which promote better nutrition. Because half of Mexico's labor force is composed of farmers whose share of the national income is 20 to 30 percent, the potential economic power of La CONASUPO to promote welfare is significant.

Growth of the food processing and marketing industry in Mexico is making many new products available in urban areas. The traditional open markets are being supplemented by super markets (*super mer-*

cados) which are much like those in the United States and offer many of the same brands of foods. In order to improve the quality of food consumption, the government has launched a campaign to encourage the inclusion of fresh, salted, or dried fish into the diet. It also acts in other ways to promote the interest of commercial establishments in diversifying the dietary habits of the average Mexican.

Clothing

Mexican clothing has been influenced by Indian, Spanish, and modern European styles, fabrics, and methods of construction. In rural areas dominated by indian culture, white and brown cottons are still spun and woven by hand, and wool, which was introduced by the Spaniards, is still used in skirts and *serapes* (woolen blankets worn like a shawl). Since colonial times, trousers, shirts, and hats have been worn by men. Today factory-made clothing is commonly worn by both urban and rural inhabitants.

Traditional dress for the male in rural Mexico included white, unbleached muslin trousers (*calzones*) which were tied with a handwoven sash, and a collarless shirt with sleeves gathered into wrist bands. Wide-brimmed hats and leather sandals with rubber-tire soles completed the costume. For warmth, a wool mantle or cloak was sometimes worn. The traditional style of clothing is still worn in northern and southern Mexico, although factory-made clothing has gained acceptance throughout the Republic.

The adoption of new clothing styles, which are more expensive than the traditional costume, has been encouraged by urban values of prestige. The modern male, not wanting to be considered old-fashioned or rural, wears mass-produced pants, a collared and buttoned shirt, and a collared jacket. Smaller brimmed hats are worn more often than the traditional *sombrero*. Shoes instead of sandals are worn daily by some, and are commonly worn at fiestas or trips to the city. Suits and ties are worn by the middle and upper income groups in the cities.

Reflecting Spanish influence, traditional clothing for women included a long, dark-colored skirt, a white undershirt, and a high-necked blouse. The costume included a half-apron with a sash and a long straight shawl (*rebozo*). In some regions, an indigenous wraparound style of skirt was worn, which was made of hand-loomed black wool introduced by the Spanish.

In contrast to modern clothing for the male, women's styles have changed toward function and economy. The new style of dress for women, costing half as much as the traditional costume, includes a one-piece dress, a full-length slip, underdrawers, a long apron and, on occasion, shoes and stockings. Although *rebozos* are still commonly worn by women, sweaters, jackets, and coats are becoming more common.

Housing

According to the 1960 Census, there are 6,738,605 private households in Mexico with an average of 1.9 rooms in each dwelling. A typical home was occupied by an average of 5.5 persons, though there are closer to 6 persons per family now. Although the quality and quantity of housing facilities is inadequate throughout Mexico, the problem is more acute in urban areas where population growth is greater. It has been estimated that only 25 percent of the population is properly housed and that the other 75 percent live in precarious housing conditions.

An important indicator of the quality of housing is the proportion of dwellings which have modern water, sewage, and power services. In 1964, 40.5 percent of the dwellings had piped water, 54 percent had toilet facilities, 70.4 percent were served sewage systems, and 28.6 percent had electricity. Many of the dwellings with these facilities were situated in the urbanized Federal District. In 1961 the government developed a plan to bring water service to all communities of over 100 people by 1980.

In addition to the problem of quality of housing, there is a growing shortage of housing in Mexico. For the entire Republic, the accumulated housing deficit was 2 million dwellings in 1962, a statistic which is steadily increasing because of an annual deficit of between 35,000 and 45,000 dwellings. At least 200,000 new units are needed each year. However, during the last 5 years public programs have added only 20,000 units annually and private enterprise has constructed only 10,000 houses and 20,000 apartment units each year. An employee-employer joint venture to develop cooperatives has a goal of 250,000 housing units by 1970. The long-term government program is for 42,000 housing units per year. Most of the recent construction has occurred in urban areas although the rural housing is also deficient in quantity and quality.

Rural housing may be classified into three categories: the primitive, hut-like *jacal*, the adobe house, and the more substantial houses of manufactured materials, which are usually found in the center of settlement. In contrast to the *jacal* and the adobe house, which are basically Indian in architecture, the houses in the core of the settlement usually show Spanish influence.

The *jacal* is made of natural materials procured in the local area including corn stalks, bamboo, palm leaves, and mud. It is usually a one-room structure with a thatched roof and an earthen floor. The *jacal* lacks electricity, running water, proper ventilation and sewage facilities. Most rural families live in adobe, tile-roofed homes, which sometimes have brick floors but more commonly have earthen floors. Adobe homes are constructed of a combination of natural and manufactured materials. These homes have one or more rectangular rooms and are ventilated only by the doorway, although some have wooden-shuttered window openings. The kitchen is often separated from the house and is constructed in the form of a lean-to with a tile roof. The average adobe house has a porch facing an enclosed patio and is separated from neighboring yards by a high adobe wall. Common conveniences include electricity, a water tap in the patio, and a raised bed. Additional bedrooms are added to the house as the family grows in size. Homes composed entirely of manufactured materials are upper income households found in the center of the settlement. Materials for these residences are often imported at great expense. Painted, plastered stone walls, and metal roofs are characteristic of these homes, which are usually the most recently constructed dwellings in a settlement.

Many rural residences have no running water or sanitary facilities. Women and children must devote time each day carrying water from the closest public fountain. It is estimated that a one-inch pipe transports as much water as 150 women working 8 hours a day. The younger generation, which has become accustomed to running water and toilet facilities in school, feels that much time is wasted in carrying water and is showing more interest in including modern water and sanitary systems in their homes.

Modern equipment for refrigeration, meal preparation, and lighting is generally desired by the rural population. However, in the majority of families, lack of money prevents the purchase of such conveniences. Interest in modern households is greatest among the younger generation, the more educated, and the middle class. Conveniences are found more often in middle income households, rather than in the wealthy rural homes where quantity is more valued, whether primitive or modern. It is not unusual to find an assortment of modern and traditional wares in most households. A house may contain a radio, a water tap in the patio, a pre-hispanic hearth as the only means of cooking, a handmill for grinding coffee, and the traditional stone *metate* for grinding corn.

Closely related to the problem of rural over-population and rapid population increase is the growing migration of rural peoples into urban centers (see ch. 4, Population). Crowding and slum conditions in towns and cities are the result of this influx of people and the general housing shortage. One-room houses made of adobe, wood, poles and rods, or rubble, dominate the high-density settlement pattern of the city. Relatively few houses are constructed of brick or masonry. Another form of housing consists of one- or two-story, patio-centered tenements, which are subdivided into one-room *viviendas*, or family units.

Cities often include smaller local units, which are not a part of the larger community but rather autonomous subcommunities of ethnically different immigrants. These neighborhoods, or *barrios*, are often peripheral to the main settlement and exhibit rural living conditions.

Because *barrio* members are not integrated into the community, they may be looked down upon by the community because of their rural background. The people of the *barrio* often live on a subsistence level and do not participate fully in the political or economic life of the community.

The older parts of cities, which are characterized by crowded conditions, contrast with the newer sections where large private homes have been built. Much of the commercial house construction in recent years has benefited the middle and upper income groups, while the Government building programs have focused on low-cost housing for the urban poor.

During the last decade, several official agencies including the Mexican Social Security Institute, the Institute of Security and Social Service for State Workers, the National Housing Institute and several private banks such as Banco de Crédito Hipotecario have been sponsoring programs for the construction of dwellings, principally in urban areas for the labor sectors. These organizations are contributing to the solution of the housing shortage in Mexico.

The Mexican Social Security Institute has constructed a low-rent community development in Mexico City. The project includes kindergartens, primary schools, and a sports center, in addition to housing units. Such a project offers some relief to the Republic's critical housing shortage and increases the purchasing power of the income of its tenants by reducing the proportion of income which is spent on housing. However, the existence of slum areas in the vicinity of this community indicates the importance of extending lost-cost housing to a wider sector of the population in order to raise the general standard of living.

Between 1958 and 1964, public housing agencies constructed 48,121 dwellings including homes and apartment units. The project consisted of 102 high-rise, multiple family units for a total of 11,916 apartments housing 69,000 people. Other functions were included in the development of this modern community. Primary, secondary, and technical schools as well as nurseries, clinics, clubs, cultural centers, and museum facilities are available to the residents of Unidad Nonoalco-Tlaltelolco. Another complete urban community was opened in 1964. One-third of its 10,000 homes are reserved for indigent paper and garbage collectors, other non-salaried workers and low-paid government employees.

Most of the federally financed housing programs have been centered in the Federal District. If Mexico is to solve its housing shortage and to increase the quality of housing, the Government must extend these programs to rural communities as well as other urban centers. Another aspect of the quality of housing, which is gaining Government attention, is the availability of public water and sewage facilities to the urban and rural householder.

Eighty-five percent of the urban population in Mexico has access to public water supplies, 55 percent having household connections and 30 percent (1962) depending upon public outlets for water. In contrast, only 16 percent (1964) of the rural population is supplied with water. Water supply and its subproduct, sewage, are significant in Mexico because of their association with disease. The quality of water supplies must be maintained because it is a potential carrier of contamination, originating water-borne diseases such as typhoid and paratyphoid fevers and amoebic dysentery.

Another group of diseases, which are not water-borne, but are controlled with the dilution of contamination by the use of large quantities of water in personal and domestic cleanliness, include the diarrheal diseases. Significantly, the provision of adequate quantities of water of good quality might greatly reduce gastritis, enteritis, and related diseases which are the leading cause of death in Mexico.

Many more homes in urban centers are connected to community-piped water systems than are connected to sewage systems. Financing repaying sewage facilities in rural areas is more difficult than for water systems. However, many organizations have realized the importance of both water and sewage facilities, including the Pan American Health Organization and the Inter-American Development Bank. Between 1960 and 1963, the Inter-American Development Bank invested over U.S. $9 million in the construction of water and sewage services in Mexico. During the same period, the Government invested over Mex $4.8 billion in rural and urban areas.

CONSUMPTION PATTERNS

Consumption patterns vary by socio-economic levels in both rural and urban environment. The annual expenditures of the rural and urban poor, who live on the subsistence level, are much the same. Most of their income is spent on food and basic necessities, and over half of their earnings must be spent on food alone. Typically, the poor spend a higher percentage of their incomes on *fiestas*, religious activities, and other diversions than the upper income groups. Because the poor exist on the subsistence level, they can make few economic investments. Sickness is a great threat to the economic stability of the poor family, for the father must borrow money at high interest rates to pay for expensive medical care.

The middle and upper income families spend relatively larger proportions of their earnings on comfort and health while spending 50 percent less on food and necessities. These families generally invest more money in educating their sons and daughters and relatively less for diversion, contribution to the Church or other religious activities. Economic investment may amount to more than 25 percent of their incomes.

The spending habits of the urban and rural middle and upper income groups vary. In the cities, the wealthy spend more of their incomes on modern conveniences such as televisions, washers, and modern kitchen equipment. The rural wealthy spend their incomes on accumulating such commodities as dishware, showing less interest in whether it is traditional or modern. The desire for modern conveniences is growing among all classes, although the poor must go into debt in order to buy them.

DIVERSION AND RECREATION

Religious festivals, or *fiestas*, are the main source of diversion for rural peoples. The Church calendar provides occasions, including saints days, Easter, and Christmas, for fiestas every month in an annual cycle. These celebrations usually include a church mass followed by band music, dancing, fireworks, and a feast. Although no one attends all *fiestas*, widows and older women participate in as many as possible and children often skip school in order to watch the celebrations. During his adult life, every man is expected to finance and organize a *fiesta*, with the assistance of his family and friends, to honor the patron saint of the village.

Each settlement gives annual *fiestas* for its patron saint as well as for nationally famous saints such as the Virgin of Guadalupe, Señor de Chalma, the Virgin of Candlemas, the Virgin of the Remedies, and the Virgin of Conception. While celebrations for ordinary saints last from 1 to 2 days, the *fiestas* for these national saints may last for 1 or 2 weeks. During these festivals, a great variety of special foods, drinks, toys, amulets, religious pictures of saints, and candles are sold to the participants. Gambling, merry-go-rounds, tent shows, races and bullfights are featured at the larger *fiestas*.

In addition to *fiestas* for saints, an annual cycle of important religious days, beginning with the pre-Lenten carnivals and ending with the Christmas *fiesta* of *posadas*, is celebrated. Carnival falls in the last half of February or early March before Lent. This *fiesta* is celebrated regionally and may include plays, mock battles between the devil and priests, or between patron saints, and may include horse races.

Holy Week begins on Palm Sunday with the blessing of palms in the churches. During the following week the Last Supper, the arrest of Christ, the sentencing and procession to the cross, the crucifixion, and the descent from the cross are dramatized. The Mass of Glory is performed on the Saturday before Easter Sunday, which is not celebrated.

Christmas activities begin on the 16th of December and end on Christmas Eve. These celebrations are called *posadas*, or lodgings, in commemoration of the journey to Bethlehem and the difficulty of finding lodging in the crowded town. During *posadas*, clay figurines of biblical characters and *piñatas* (paper-mache figures of animals, planes or cradles which are filled with candy and toys) are sold in the markets. Processions of singers visit homes in their neighborhoods symbolically asking for lodging for Mary and Joseph. Paralleling the biblical story, the singers are allowed to enter after being refused several times. Once inside, they are served food and drinks and a *piñata* is broken. Christmas Eve is celebrated in song and mass, and presents are not given at this time, rather on January 6th when they are brought by the Magi. Religious *fiestas* have declined in popularity with the increasing availability of modern entertainment such as movies, radios, and secular forms of diversion.

Other Church-oriented celebrations occur at baptisms and weddings which are followed by festive dinners. Godparents and neighbors join the celebrations to eat *mole* and to drink beer and tequila. The Church also organizes clubs, whose activities include presenting religious pageants and plays, singing, attending funerals, and celebrating saints' days.

National and patriotic holidays are increasing in popularity and are providing a new form of diversion. May 5th is the anniversary of the victorious battle with the French in 1862, symbolizing the defeat of French intervention in Mexican affairs. Many towns give sham battles to commemorate this event. Independence Day is celebrated on September 16th, when all governmental buildings are decorated with rows of red, white, and green electric lights. In the capital, the President of the Republic traditionally greets the crowds of festive citizens and rings the bell of independence. Large parades are held the next day. Many patriotic celebrations differ from traditional *fiestas* being sponsored by school teachers and dominated by children who perform plays, dances, recitations, and speeches and songs in explanation of the holiday. Another national holiday, the Day of the Dead, is celebrated on November 12th, when people expect visits from the dead and receive them as honored guests. Bread made in animal and human forms, candy skulls, and toy skeletons are made for this occasion. People often prepare altars of food for the Day of the Dead believing that the dead partake of food in spirit and the living eat it afterward.

Adult recreation in rural areas has been influenced by urban forms of diversion. On Sundays, many adults visit larger towns where women go window shopping or attend movies and men visit friends, play pool, and drink. Young adults imitate urban diversions by organizing parties and learning modern dances. The older generation dislikes these activities because they do not conform to the traditional patterns of courtship (see ch. 7, Family). In more traditional areas, adolescent boys roam the streets in groups often singing in front of the homes of their girl friends.

Organized sports, including basketball, soccer, baseball, and volleyball, have been introduced to rural areas by schools. The older generation has offered resistance to these recreational activities because they view play as a young child's activity and feel that sports are a waste of time, distracting adolescents from work in the fields. Mothers complain that sports overheat their sons increasing susceptibility to illness while older men resent the popularity of new sports over traditional diversions such as cockfights and rodeos.

New sports contrast with traditional games which are characterized by quiet play, little exertion, few required skills, no individual competition, and loosely organized play groups. Most of the traditional games involve running and tagging, singing, and imitating adult roles. In contrast, newer games require team effort, definite goals maintained by scoring, development of leadership, and physical exertion.

Parents permit young children to amuse themselves at play. Since there are few commercial toys which parents can afford, children learn to make their own toys from sticks, stones and mud. Girls spend most of their time imitating their mothers in the household by building small mud houses or pretending to cook meals. Boys play marbles, imitate bullfighters, fly kites, and spin tops. Some communities have built playgrounds for their children in order to keep them from playing in the streets.

In Mexico City and other urban areas, there is a wide range of facilities for diversion including parks, museums, restaurants and nights clubs, stadiums for spectator sports, and playgrounds. On Sundays, the urban populations enjoy picnicking and boating at public parks like the floating gardens of Xochimilco and the grassy slopes of Chapultepec Park in Mexico City. The Museum of Natural History and Anthropology at Chapultepec Park includes displays of artifacts from all areas of Mexico and was the headquarters of the Cultural Olympiad. During the Olympics, art treasures from the participating countries were on display in this museum.

The Olympics, which were held in Mexico City in 1968, symbolized the growing interest in athletics and spectator sports in Mexico. In addition to the facilities constructed for the track and field events of the Olympics, the capital has stadiums for bullfighting, soccer, basketball, boxing and wrestling, football, horse racing, and *jai alai*. Facilities for fencing, gymnastics and riding, which are traditional sports among the urban elite, are also available.

To encourage athletics in schools, the Government has built playgrounds, which are supervised by recreation directors and coaches, for the youth. In high school athletic programs, coaches are developing sprinters, hurlers, high jumpers, and pole vaulters for future international competition. The Yaquí and Tarahumara Indians have already been recognized for their abilities in long-distance running.

CHAPTER 9

EDUCATION

Two foremost characteristics of Mexican education are dynamism and difficulty. The dynamic qualities of the Nation's school system are a relatively recent phenomenon, dating from the Revolution (1910), while the difficulties have existed for hundreds of years.

The primacy of education in Mexico is revealed by pronouncements at the beginning of the constitution. Article 3 guarantees the right of all Mexicans to an education which is to be free, compulsory, and secular. The document declares education is to play a major role in contributing to the social, political, economic, and cultural advancement of the individual and the society. Curricula are to emphasize the preservation of Mexican culture and the promotion of national welfare through the use of scientific methods and modern technology.

Efforts to implement the above Revolutionary goals have helped bring about a transformation of Mexican society and have done much to raise the country out of medieval peonage into modern progressivism. From farms to factories, from Indians to industrialists, and from peasants to professionals, the benefits of education can be seen by lowered illiteracy rates, higher living standards, further national unity and stability, rising real incomes, increasing productivity, and growing Mexican technology. In 1968 illiteracy was down to 28 percent and technical education enrollment had risen from 46,000 in 1958 to 200,000 in 1968.

These cultural transformations proceeded with noteworthy educational developments. Before the Revolution there were only 641 primary schools in the whole country and in rural areas they were practically unknown. By 1965, there were over 39,000 primary schools with three-fourths of them in rural regions and substantial growth was also evident at secondary and higher levels. In 1968 over 10,000 new class rooms were built. Prefabricated school rooms have been developed and are being placed in isolated areas. The phenomenal school building performance led to the establishment in Mexico of the Regional Center for School Construction for Latin America, under the sponsorship of the United Nations Educational, Scientific and Cultural Organization and the Organization of American States.

Mexican attitudes toward and demands for learning have changed with the increasing development of education. Before the Revolution, most of the lower classes felt education was an unattainable and unnecessary part of life. The upper classes acquired knowledge largely for status and prestige. Today the majority of Mexicans feel that everyone should receive as much schooling as possible. All segments of society are becoming aware that education is necessary to achieve a more pleasant, prosperous, and productive existence.

The advances in education and the society's growing desires for schooling pose difficulties. In 1968, according to government figures, 78 percent of Mexican children from 6 to 14 years of age attended schools in urban areas, 59 percent in rural regions. By 1980 the percentages are hoped to be 86 and 85, respectively. Unofficial sources give lower current statistics on enrollment. Both official and unofficial observers realize that a sizable number of children (1,454,000 in 1965) still have no schools to attend. Primary enrollments must more than double over the next 5 years to keep up with the soaring population. Insufficient funds, rural poverty, and a lack of teachers also lessen the effectiveness of education.

In spite of the problems, heroic efforts are being made to reduce them and Mexicans are justifiably proud of their tremendous accomplishments which have created an extensive and ever-expanding education system.

The federal government maintains institutions that provide all types of instruction at every level of the system. States and municipalities have specific responsibilities for the development of education in their own areas. These public institutions account for approximately 75 percent of all the nation's schools with the rest being run by private organizations. A Ministry of Education controls all public and private schools and oversees the constantly extending activities of educational institutions.

Over 26 percent of the 1968 national budget has been allocated to education. Millions of pesos have been poured into normal school programs with students usually given free texts and materials. In 1963 teacher-training institutions developed so rapidly that 90 percent of the available primary positions had been filled and in some cases there were surpluses. In the face of handicaps and seemingly insurmountable problems, the degree of educational success so far achieved has been truly remarkable. There are antonyms for most of the problems and planners are constantly launching new programs and improving existing ones in their continuing drive to bring ideals close to reality.

HISTORICAL PERSPECTIVE

Colonial Period

Early Spaniards noted that the Indians had an organized system of education. Schooling for children of noble families, military chiefs, and priests imparted knowledge necessary for perpetuating the ruling classes positions while folkways and manual arts training were emphasized in the lower classes. Education stressed respect towards hierarchical superiors, rigid morality, and religious rites, especially the latter, for religion and education were closely connected. This connection prompted the destruction of indigenous educational institutions because they conflicted with a major aim and justification of the Conquest, that of converting the "heathen" to Christianity. The void left by the eradicated Indian education system was partially filled via 16th-century missionary activity.

The missionaries displayed compassion and concern for the welfare, redemption, and education of the vanquished Indians. They organized schools with instruction in reading, writing, arts, crafts, Catholic ritual, and dogma. These friars and priests accomplished several New World "firsts" including an elementary school (1523), a printing press (1535), and a university (1553) founded 85 years before Harvard. The early scholastic achievements were notable but unrepresentative of general colonial trends in education.

Exploitation and education were not compatible to the Spaniards, who thought that continuance of the former involved curtailment of the latter. The first schools were so successful that many Spaniards feared they would upset the Indians' docility. Thus instruction soon became confined to the Spanish elite and to the children of *caciques* (Indian nobles conscripted by landlords to act as intermediaries between conqueror and conquered) (see ch. 3, Historical Setting).

In the 17th and 18th century, the Church's interests became increasingly oriented towards the elite landholding classes. Schooling for the native masses was generally thought to be undesirable and many alleged the Indians were incapable of learning. Education became limited and geared to the aristocracy and to ecclesiastic vocations with a curriculum characterized by medieval European scholasticism. Rich landholders often bequeathed real estate and money to the Church in return for its spiritual services. The clergy was becoming more involved in politics and economics than in proselytizing and education.

The Church's monopoly on education, as well as its increasing control of Mexican politics and economics, continued until the early 19th century and the Independence Movement.

Postindependence

Independence and subsequent activities brought preliminary attempts at educational reform. The new national government passed legislation in 1829 secularizing education and in 1833 a Department of Public Education was created. Laws promulgated by President Juárez in 1867 declared primary education was to be free and compulsory. The laws were ineffective due to constant political polemics, violence, and struggles between progressive and conservative forces. Also, since the Church operated the educational institutions, restricting them meant reducing school opportunities because the government had practically nothing to take their place.

Church schools were reopened during the Díaz regime (1877–1911) and anti-clerical legislation was mostly ignored. Throughout the country, religious schools (mainly Catholic) and other private schools (notably Lancastrians) were more influential than the government schools. Justo Sierra and othe pioneering Mexican educators initiated primary and normal (teacher training) programs, reestablished the National University, and promoted education for the masses. Despite their efforts, schooling remained a luxury for a privileged minority and over 70 percent of the population was still illiterate on the eve of the Revolution in 1910.

A major goal of the Revolution was to provide *tierra y libros* (land and books) to the illiterate and impoverished Mexican multitudes who could no longer be ignored and ignorant without bringing grave consequences to everyone, including the upper classes. The constitution of 1917 recognized the paramount importance of educating the populace. However, between 1911 and 1921 a volatile political atmosphere, stringent financial conditions, and other factors forced the first Revolutionary governments' expectations of accomplishment to lag far behind their goals and ideals.

In the 1920's actions began to match aspirations. A national motto, *educar es redimir* (to educate is to redeem), and spectacular education reform programs that later became the pride of the Revolution were created by intensely dedicated men such as José Vasconcelos.

Vasconcelos was the first head of the new federal Department of Education during the Obregón administration. His formidable job included developing a national program of education, providing adequate teacher training institutions, and renovating rural education.

The national program received generous federal allotments. The budget for education in 1921 was 4 times larger than in 1920; in 1922 it was 13 times larger; and in 1923 it was 15 times larger than in 1920. With this financial backing, Vasconcelos and others poured all their energy into fighting the educational evils of extreme rural poverty, rampant illiteracy, language and ethnic divisions, a lopsided economy favoring the urban minority and ancient traditions which made schooling advances difficult.

Anti-illiteracy campaigns were organized; hundreds of schools and libraries were built; and a national art program was established which appealed to the aesthetic sensitivity of all Mexican classes. The country's foremost artists joined the cultural betterment movement as drawing instructors and as art school inspectors. Other artists were commissioned to paint massive murals and frescoes depicting the themes and spirit of the new Revolution.

Teacher-training programs were considered a crucially important part of educational reform and millions of pesos were spent in the construction of normal schools. New rural teachers, referred to as *misioneros* (missionaries) were sent into backward regions to familarize themselves with rural conditions, stimulate interest in learning, and organize schools which adapted to the needs of the community in which they were located. To assist the teachers in their work, "cultural missions" were established.

The cultural missions were an original Mexican educational idea. Often referred to as *normales ambulantes* (traveling normal schools) they consisted of a team of specialists in the fields of agriculture, carpentry, tanning, soapmaking, music, nursing, and physical and normal education. Their main objectives were to improve the qualities of teachers in service and to better social and economic conditions in isolated rural communities.

The cultural missions and other public education activities were opposed by the Catholic Church who saw the public schools as deleterious to their own educational institutions. Though the constitution forbade religious institutions (predominantly Catholic in Mexico) from participating in primary education, the laws were largely overlooked for political and practical reasons until the anticlerical Calles (President, 1924–1928) administration.

Provoked by parochial propaganda against public education and the national government, Calles ordered all religious schools to close. Bitter battles between Catholics and government forces raged for more than a decade over education and other issues. Eventually, comprises were made and clandestine Catholic schools began operating openly though they were named after Mexican patriots instead of saints.

During the Church-state conflicts, public school construction and teacher-training programs were pushed to fill the gap made by the ousted Catholic schools and teachers. In 1926, Mex $46 million (Mex $12.50 equal US $1.00), or 8.5 percent of the Federal budget plus 40 percent of the total budgets of the states were spent on education. Primary, secondary, technical, and agricultural schools and regional universities were established in growing numbers. Cárdenas (President, 1934–1940) initiated a 6-Year Plan calling for increased education appropriations and 2,000 new schools a year. Badly needed rural facilities were expanded and their numbers doubled in less than a decade. A campaign to enforce Article 123, which required ranchers to provide schools for their workers, created 1,500 more new schools. Literacy drives were promoted throughout the country, though the most successful and famous anti-illiteracy program was enacted later by Cárdenas' successor, Camacho (President, 1940–1946).

The designer of Camacho's anti-illiteracy program was Jaime Torres Bodet, a renowned Mexican poet, diplomat, and educator, who revised Article 3 to include a greater emphasis on national educational control and planning. Numerous institutions for improving the quality of teachers and rural education were created. Each literate Mexican between the ages of 18 and 60 was required, as a patriotic duty, to teach reading and writing to one illiterate between 6 and 40. Free primers in Spanish and the major Indian languages were made available. In the first year of the program, 700,000 learned to read and write and literarcy for those over 6 years of age climbed from 41 percent in 1940 to 55 percent in 1950.

Throughout the 1950's stress on education continued by means of expansion and modernization programs. The National University of Mexico moved to a new "University City" on the outskirts of the capital and it soon became one of the greatest cultural centers in Latin America. Mexico's leaders and educators looked with pride at the new university as a symbol of the ongoing progress of the Revolution.

Progress, however, had been accompanied by a plethora of problems. The latter became apparent when one compared the educational ideals, as expressed in the constitution and through the evolving traditions of Mexican pedagogic thought, with the operational realities.

The government-student situation became difficult in 1968 when, immediately before the Olympic Games, students at the National University rioted. The government broke a 40-year precedent by having soldiers on the University grounds; previously University campuses had been a legal sanctuary.

EDUCATION AND SOCIETY

Rights and Goals

Ideally, the constitution states that education aims to develop harmoniously all the faculties of the human spirit, at the same time inculcating a love of county and a consciousness of internationalism, independence, and justice. Education is to be democratic, fostering a system of life based on continual economic and cultural improvement, and it is to be national in the sense of contributing to the country's political and social betterment. All Mexicans, irrespective of sex, class, and income, are to have an equal right and opportunity to education which is not only to be free but also compulsory (between the ages of 6 and 12) and secular (aloof from religious doctrine). The ultimate goal of Mexican education is to raise the level of human existence by fulfilling both the desires of individuals for their own development and the needs of society for its general development.

All of the foregoing goals and responsibilities are to be carried out by the federal government through the Ministry of Education. That educational responsibilities are assumed, centralized, and controlled by the federal government is due to the inability of state and local governments to meet their educational responsibilities and to the Mexican revolutionary emphasis on national control of the country in the running conflict between church and state. The Ministry prescribes nationwide policies and apportions educational duties between federal, state, and local authorities.

Private educational institutions are overseen by public officials and those wishing to provide primary, secondary, and normal education must receive express authorization from the state. Since public schooling is secular, religious bodies are not to take part in the aforementioned types of education. Instruction imparted by private schools must follow official plans and curricula and comply with the general principles underlying public education.

The contemporary principles forming the foundation of education in Mexico have evolved from traditions dating back to the 16th century. Over the centuries general tendencies and thoughts have swung away from total Church control toward total state control; away from conservative, dogmatic ecclesiastical education towards progressive, scientific public education; away from abstract and theoretical instruction emulating classical studies towards practical and useful instruction emphasizing present realities; and away from the idea of education as a privilege reserved for the upper classes as a means of preserving status towards the idea of education as a right of all classes and as a means of attaining social mobility.

Educational thought was borrowed from Spain and other European countries during the Colonial period. It tended to be classically oriented and socially restrictive. After Independence, as control of education shifted from church to state, a corresponding change in ideals occurred. The purpose of education was to create better Mexicans instead of good Catholics. Positivism came into vogue as a reaction to years of unquestioned scholasticism, and pragmatism exchanged places with piety. In the decades following the Revolution, positivism slowly gave way to less materialistic thoughts as the spiritual elements of Mexican character were recognized. A central goal of education became that of making the individual aware of his identity and proud of his cultural heritage. The importance of relating studies to life was a paramount concern of modern Mexican educators. They tried to define their objectives both in terms of local needs and national aspirations with the overriding aims being to raise the standard of living of all Mexicans, encourage social integration, and promote national unity.

In the last 150 years, attempts to realize the above educational thoughts and aims have been made. Education grew more important as the years passed by, and today, as one of the country's leading instruments of progress, it has become of vital significance in all areas of Mexican society.

Education in Operation

A constellation of problems is revealed when examining the extent to which Mexican education meets the needs and desires of society. In the mid-20th century these problems included the Ministry of Education bureaucracy, a shortage of classrooms and facilities, abated though continuing rural poverty and backwardness, rising though still low registration and attendance figures, unrealistic curriculums, insufficient funds, some persisting illiteracy, conflicts with the Church, and the demographic explosion.

The Ministry of Education controlled a large bureaucratic network that extended from Mexico City to the remote rural villages and even local officials in the latter were appointed by the Ministry in the Capital. Federal control allowed programs and policies to be integrated with other aspects of national development. Since the Minister of Education occupied a cabinet post, changes in administrations often brought shifts in personnel accompanied by a disruption of previous educational programs.

High Ministry officials, usually working and living in the Capital, tended to promote urban school programs and interests, sometimes at the expense of badly needed rural facilities. The Ministry's policies were not only influenced by its own personnel but also by different segments of society. For example, during the 1940's and the 1950's lawyers and politicians speaking for the rising middle class (desiring education for social and economic mobility) and industrialists (looking for technicians to fill positions) were more interested in intermediate and higher education than in primary schooling. Their wishes were realized with the expansion of post-primary facilities being more rapid than that of elementary schools.

Participation

The pressing need for constructing primary schools was reflected by the Republic's severe shortage of classrooms. The need for building new schools was so great that little money remained for taking care of the thousands of existing classrooms, and in many areas buildings and equipment were rundown and poorly maintained. The lack of instructional facilities meant that only about half of the school-age population could attend school in the late 1950's. The dearth of classrooms was most pronounced in rural regions. Of 3 million children without schools in 1958, three out of four lived in a rural environment.

Even when schools were available, rural poverty and backwardness lessened the effectiveness of their presence. A substantial percentage of the population, particularly in rural areas, remained ill-fed, ill-housed, and ill-clothed (see ch. 8, Living Conditions). Poverty-striken parents needed their sons to work in the fields and their daughters to help with household chores leaving little time for attending school.

In isolated areas, education faced superstition, feelings of inferiority, indifference, distrust, and even opposition. Peasants in remote regions, especially the Indians, sometimes regarded schooling as an attempt by the government to subjugate them and despoil their culture. They sought security in traditional customs and did not believe education would bring any material change to their impoverished circumstances. In Mexico's countless villages, adults, the majority of whom received no education themselves, often felt they learned all they needed to know without school and thus did not force their children to attend. Lacking parental reinforcement, most youngsters dropped out before finishing their course of studies.

Low registration and attendance figures were a vexing education problem. In 1950, only 37 percent of those in school attended class regularly and only 33 percent did sufficient work to earn a promotion to the next grade. In rural areas, 57 percent of those enrolled were in the first year, 91 percent were in the first three years and one-half of one percent were in the sixth year. In urban areas the percentages were higher, for example the sixth year in city schools accounted for 8 percent of the total enrollment. These figures indicate that a very small number of young people possessed qualifications necessary for education beyond the primary level.

The low attendance figures were partially caused by the inadequacy of the schools. In 1950, of 19,000 rural primary schools only 5 percent offered classes through the sixth year and about half offered only 3 years of instruction.

Curricula

Unrealistic curricula also discouraged attendance, especially in rural areas. Shortages of teachers forced the hiring of many inadequately trained (and inadequately paid) instructors. Their horizons were limited as was their teaching ability. Few of them had practical conceptions of how their schools might be made effective institutions for contributing something to the community beyond teaching children regular routine subjects. With some notable exceptions and despite the introduction of rural normal schools, curriculums tended to be divorced from everyday life and the immediate needs of the population. Courses stressed reading and writing instead of rehabilitation and agriculture. Reciting memorized minutiae did little to improve the standards of living while it did much to bolster the peasant's attitude of the impracticability of making sacrifices for learning and literacy.

Higher levels of education were also confronted with dysfunctional instruction. Remnants of classical curricula were evident in rigid course offerings that stressed pure and theoretical knowledge with little practical fieldwork or lab exercises, which sometimes resulted in producing students with unclear vocational plans and frustrated graduates with unneeded skills. Professors were often not well trained themselves and little concerned with student or curriculum needs. Many taught only part time either simply for the prestige it afforded or because low faculty salaries forced them to find another job.

Finances

Underpaid teachers mirrored one aspect of Mexico's perennial pedagogic problem, insufficient funds. The lack of resources had impeded progress in all phases of educational development. Numerous expertly planned programs had been unsuccessful because the material means for implementing them, from pencils to payrolls, were inadequate.

Since public education is free, the burden of financing falls mainly to the national and state governments whose revenues come from taxes (see ch. 24, Public Finance). Incomprehensive systems of taxation coupled with indifference on the part of many in a position to help (particularly wealthy private commercial, business, and agricultural corporations) and rather rare philanthropy did not contribute to the financial resources so necessary for development. Also, impressive statistical gains over the years in education expenditures were partially offset by inflation. Annually more pesos than ever before were being allotted to educational projects but rising operation costs lessened the significance of increased expenditures.

LITERACY AND LANGUAGE

National literacy campaigns were among the many educational programs effected by the above dilemma which worked against a solution to one of the country's biggest problems, illiteracy.

Learning the essentials of reading and writing can be done without learning much else. Literacy is of little value unless the education program is comprehensive enough to help change social and economic conditions so that the newly acquired skill can be of use to the individual in his local environment. The existing pandemic illiteracy pointed out the inability of the education system to meet the needs of society. Illiteracy was also an obvious obstacle to the goals of social integration and national unity.

In 1958, over 40 percent of the population was illiterate and the percentage was probably higher because not everyone taught to read and write retained their knowledge. Illiteracy was less prevalent in the larger cities and in the northern states while it was greatest in isolated rural regions and in the southern states. Widespread illiteracy in the latter areas was due mainly to the heavy concentration of Indians in those regions. Thousands of Mexicans, especially Indians, spoke one of more than 52 languages or dialects (see ch. 5, Ethnic Groups and Languages). This language labyrinth represented a serious obstruction to educational advances.

The high correlation between low-income groups and illiteracy indicated that poverty was another ever-present barrier to progress. A correlation between age and illiteracy was also evident with younger age groups showing less illiteracy than older segments of the population. The latter relationship reflected some success in the continuing literacy campaign efforts.

SOCIAL PROBLEMS

Literacy drives, as well as other government public education programs, were subjected to criticism and interference by conservative elements in society, though their defiance was less outright than in the years following the Revolution. Many ecclesiastic officials refused to acknowledge the ability of the state to provide adequate education for Catholic children because it ignored the supernatural. Conservatives objected to co-education, which complicated classroom shortages, while priests discouraged parishioners from sending their children to public schools. Parochial schools were tolerated by government officials, despite the constitutional restrictions, because they were reluctant to provoke the Church unnecessarily and because schools were desperately needed.

Social control was patent in the government's tolerance of religiously run schools. It no longer feared Church instruction because public education was well established and more persons were graduating from public schools each year than from private ones. Furthermore, coming from the latter could bar a graduate from high national administrative positions and, the government still reserved the right to close church schools at any time. Notwithstanding the Church's dislike for those controls, its relationship with the government during the last two decades had been fairly amicable except for a recent skirmish over obligatory textbooks (see ch. 11, Religion).

One other problem that involved the Church, because of its ban on population limitation, was the demographic explosion. Mexico's prolific population had one of the highest growth rates in the world (from under 0.5 percent in 1900 to over 3 percent in the 1960's). If the annual increase (excess of births over deaths) of 31.9 per 1,000 continued, the population would double itself in less than 23 years (see ch. 4, Population). The implications of those figures for educational development in Mexico were profound. A quarter of the total populace was of school age, and classrooms could not be built fast enough to keep up with the burgeoning birth rate. Educational progress in some areas was virtually at a standstill due to the ever-increasing population.

The above tableau of Mexican education emphasized complex, interrelated weaknesses and shortcomings of the system but the difficulties described do not stultify or discredit the efforts of the country's past and present leaders to educate their people. To the contrary, in the face of handicaps and seemingly insurmountable problems, the degree of educational success so far achieved has been truly remarkable. There were antonyms for most of the problems discussed and planners constantly launched new programs and improved existing ones in their continuing drive to bring ideals close to reality (see table 12).

Table 12. Level of Education in Mexico, 1950, 1960, and 1965

Level of education	Schools [1]			Students		Teachers	
	1950	1960	1965	1965		1965	
	Total	Total	Total	Total	Female	Total	Female
Preprimary	976	1,852	2,431	336,863	172,751	8,782	8,782
Primary	23,075	32,684	39,075	6,916,204	3,301,104	148,273	86,546
Secondary [2]	513	1,838	3,785	848,756	315,030		
Higher				133,406	22,314	16,185	2,862
Normal	68	164	212	63,561	38,389	6,808	

[1] Both public and private schools.

[2] Both general and technical schools.

Source: Adapted from Roberts, C. P. & Kohda, T., *Statistical Abstract of Latin America 1967*, Los Angeles: University of California, Latin American Center; UNESCO, *World Survey of Education*, Paris, Vol. II. 1958 and New York, Vol. IV, 1966.

An impressive step in that direction was taken in 1959 with the establishment of a new 11-Year Plan. Its principle objective was the extensive expansion of opportunities for primary education. By 1970, over 36,000 new schools (approximately 10,000 in urban areas and 26,000 in rural areas) were to be built. A unique feature of the Plan was the free distribution of textbooks on a nationwide scale. To realize these and other goals, unprecedented expenditures were required. Budget allocations for education amounted to 11.5 percent of the whole in 1950 but under the stimulus of the 11-Year Plan they rose to 18 percent in 1960 and to over 26 percent (the equivalent of US $518 million) in 1968. The increasing financial resources brought encouraging progress, notably in classroom construction and teacher training.

New Programs

In 1968 the Minister of Education announced plans for the construction of 10,000 new classrooms (one every 2 hours) in that year alone, adding to the thousands constructed over the preceding 8 years. Even the poorest communities could take part in the school building crusade thanks to new, inexpensive "pre-fabricated" classrooms.

The Pre-Fab Kit can be easily shipped to isolated areas, and where no roads exist pieces can be packed-in by animals and people. The pieces are put together with local labor and materials supplied by the community in which the school is built. The attitude of the peasant toward schools and education often changes from suspicion and apathy to cooperation and eagerness after putting long hours of work in on the actual building of a school. The new structure becomes a source of pride to the community and parents are apt to see that their children receive maximum benefit from it. The ingenious pre-fab classrooms are a practical solution to providing schools for the thousands of children now without them.

To provide teachers for the new schools was another matter. Millions of pesos have been poured into normal school programs with students usually given free texts and materials. Entering the field became more lucrative due to rising salaries and generous scholarships. Teacher training institutions developed so rapidly that in 1963, 90 percent of the available primary positions had been filled and later in the decade surpluses appeared, though much remained to be done at the intermediate and higher levels.

Numerous measures aimed at reducing the inequality of educational opportunity between rural and urban regions are in progress. Dozens of the cultural missions penetrate isolation and ignorance along with countrywide and international organizations, such as the National Indian Institute and CREFAL (Centro Regional de Educación Fundamental Para La Américana Latina). They promote positive social and economic change by teaching people to make the most of their immediate environment and from chicken-ranching programs to potable water projects, gains in rural living standards continue to be made. These organizations supplant rural schools in areas where the latter do not exist and supplement them where they do.

In 1964, over 3 million meals per day were provided with 80 percent of them going to children in country districts through the National Institute for Child Welfare. Another rural project, introduced in 1967, was the "traveling school" which remains in an area for 3 months, thus visiting four communities a year. Over 200 of these peripatetic schools are now in operation as part of a coordinated attempt to stimulate primary instruction and combat illiteracy in sparsely populated hamlets.

Illiteracy is losing ground as accelerated campaigns attack it from all angles. In 1965, 12,500 literacy centers were in operation with hundreds more being opened each year. The National Commission for Free Textbooks had distributed over 150 million of them by 1967. New reading rooms, libraries, and publishing houses added to the availability of reading materials. The Mexican military establishment furthers literacy drives by teaching illiterate recruits to work with words as well as rifles. Mass media are employed on an expanding scale. The Centro Audivisual de Alfabetización (Audiovisual Literacy Center) creates and directs literacy courses televised in the Federal District, Quadalajara, and Monterrey and broadcast by radio over large areas of the nation. One future proposal suggests a nationwide educational television network, reaching all parts of the country via satellite transmission. The success of existing programs was reflected by statistics indicating an 11 percent drop in illiteracy between 1959 and 1968. In the latter year the illiteracy rate was 28 percent of the total population and government officials hoped to pull the percentage down to 20 percent by 1973.

Inspired individual and private initiative helped bolster literacy levels and the quality of education. For example, an enterprising Mexico City woman and friends started giving classes in a park in 1965 with 10 pupils, the "student body" had risen to over 700 in 1967 and the school's leaders were trying to meet requests for more branch operations in other parks around the city.

An example of interacting public and private promotion of education was seen in the School Maintenance and Restoration Crusade of the early 1960's. The National Advertising Council, a public service group of 300 prominent businessmen and other large and small organizations such as the Nation Bank of Mexico and local Four-H clubs, mobilized manpower, materials, and money to restore thousands of rundown schools. In the largest public service advertising campaign the nation had ever seen, radios, televisions, movie house newsreels, billboards, and posters saturated the country with slogans such as "Better Schools Will Make Our Children Better Mexicans." Citizens enthusiastically responded and over 10,000 schools were refurbished.

Beside flourishing activity at the primary level, substantial strides were being taken to uplift the quantity and quality of education at intermediate and higher levels. 1968 statistics showed that development was critically needed in those areas. Only 19 percent of the nation's 15- to 19-year-olds were attending middle level technical schools and only 1.9 percent of the 20 to 29 age group were attending higher professional schools. Planners hoped to boost the figures to 36 and 6 percent, respectively by 1980.

A major build-up of secondary and technical schools is underway to reach the above goal. The government is allocating increased sums to middle-level institutions and, on a smaller scale, private enterprise is amplifying its support by sponsoring technical schools, subsidizing the cost of training (potential) employees and by donating equipment so that practical training is available for future mechanics, electricians, technicians, and other commercial-industrial career seekers.

In the past, private enterprise had largely eschewed contributing funds to educational efforts, but recently their financial aid has become f some importance. The large corporations and concerns have begun realize, as the demand for technicians and professional personnel rows more acute due to rapid industrialization, that their future rosperity hinges on the alleviation of manpower shortages.

The paucity of persons in technical and semi-professional fields is ue largely to tenacious upper class values still dictating that it is ndignified to work with one's hands. The social influence of the ominating classes filters down into the middle classes and makes the arents reluctant to send their children to terminal technical schools ecause nothing can compete with the status and prestige of higher ducation. The government and school guidance counselors are trying o persuade young people (and their parents) that manual labor is ot degrading and that technical skills acquired at an intermediate evel school may be more important in the contemporary world than nowledge of law or philosophy taught at the universities.

Attitudes are changing as seen by enrollment rises in technical edu-ation schools from 46,000 in 1958 to more than 200,000 in 1968, with orresponding faculty and facilities expansion. In 1962, with a grant rom the United Nations, the National Preparatory Center for Tech-ological Teaching (CNCET) was created to prepare instructors for eaching in technical schools and to train industrial workers. The Na-ional Polytechnical Institute recently announced plans for construc-ion of a new unit that will house from 8,000 to 10,000 students. Also, rograms of quick practical training are being developed for the housands of young people who go through primary school but do not each intermediate or higher levels.

The universities are trying to meet the urgent needs of industry, ommerce, and agriculture by emphasizing "practical" course offerings nd by instituting special programs to diminish the high percentage of rop-outs at higher levels. For example, the National University ffers "short courses" that allow a flagging student to earn a technical iploma though he has not fulfilled the requirements for a regular egree. For the diploma, a student does not need to pass a general xam or write a thesis but he must have passing grades in subjects required for his speciality. The technical diploma entitles drop-outs to etter employment and also helps relieve the shortages of semi-professional manpower.

The vanguard of the short course program and of higher education in Mexico is the National Autonomous University. With over 95,000 students in 1968, the institution accounted for 25 percent of all higher education in Mexico. Though good universities exist in the provinces, students do not believe titles from them carry as much weight as those granted by the National University. Therefore, attending the National University has become a status symbol causing freshmen to flock in from all over the country and creating extreme overcrowding problems. Overall university enrollment is impressive, however (see table 13).

Table 13. Selected Institutions of Higher Education in Mexico, 1967

Institution	Students	Teachers
Universidad Nacional Autónoma de México [1]	95, 000	8, 141
Instituto Politécnico Nacional	62, 502	5, 068
Universidad Veracruzana	37, 008	3, 440
Universidad de Guadalajara	15, 157	1, 128
Universidad de Nuevo León	13, 180	953
Instituto Technológica de Monterrey	11, 721	467
Escuela Nacional de Ingeniería (Engineering)	6, 800	520
Universidad Autónoma de Guadalajara	4, 100	467
Universidad Iberoamericana	4, 000	524
Universidad de Chihuahua	3, 673	365
Universidad Benito Juárez	3, 375	244
Universidad Guanajuato	3, 100	740
Universidad de Yucatán	2, 231	148
Universidad de Queretaro	2, 122	342
Universidad de San Luis Potosí	1, 500	180
Universidad Femenina de Mexico	1, 200	137
University of the Americas	850	91
Escuela Nacional de Antropología e Historia	273	44

[1] Data for 1968.

Source: Adapted from *World of Learning 1967–1968*, Eighteenth Edition, London: Europa Publications, Ltd., 1968; Londen Times Educational Supplement, May 17, 1968.

Overcrowded conditions impair the quality of teaching and the consequent shortage of teachers forces the hiring of unqualified instructors, further reducing educational standards. Faculties and facilities have always been plagued by inadequate resources and some students of questionable caliber due in part to the low tuition fees and to uncompetitive entrance requirements. Attempts to raise fees or admission standards unlease a flood of opposition from various student organizations on campus. They believe higher education is the right of all and not solely the privilege of the rich or talented.

The foregoing situation alludes to the powerful role of students in Mexican higher education who often voice irreverent and sometimes irrational criticisms of their "establishment" as do their northern counterparts. But unlike their American peers, Mexican students enjoy complete autonomy and if demonstrations or riots break out on campus (which they frequently do), government and police authorities stand outside the university gates and observe. When friction occurs, it is usually prompted by a small minority of the total student body. Contrary to claims of pervasive Communist control, only about 5 percent of those enrolled are considered radical leftists.

Bothered by the above problems, university administrators have been proposing sensible solutions. Officials have increasingly come to feel that autonomy should be for freedom of thought and study but not for lawlessness. Proliferating pupils have forced the utilization of entrance exams, notwithstanding student protests, and these have improved the quality of incoming freshmen. Standards for professors have been upgraded and rising salaries encourage better scholarship. Realizing that many students are capable of paying for their education and that personal investment by students stimulate them to stay in school and make the most of their education, fee increases are being carefully considered.

To relieve the overcrowded National University and the all-too-common "sardine-can style" education, decentralization measures are being taken. Counselors urge students to attend near-home provincial universities where they can enjoy more personal attention and less crowded classes. An imaginative proposal, following examples of other higher education institutions in the world such as the University of California, suggests building new branches of the National University in several underdeveloped areas of the Republic. These campuses would create new "university towns" for the ever-increasing numbers of students.

To varying degrees, the formidable difficulties described earlier and throughout this section still existed in 1968 despite the praiseworthy proposals and attempts to ameliorate them. Yet the unrelenting problems continue to be met by strenuous efforts to solve them, and slow but promising progress is being made.

Awakening of the masses to the benefits of education has been especially encouraging. Several decades ago the majority of peasants considered education unnecessary to existence. Today, due to the endeavors of dedicated leaders, educators, and individuals, most Mexicans consider education an essential part of patriotism, a key to the future and a better way of life.

The ceaseless efforts to satisfy the growing needs and demands of Mexico's education-conscious society are manifested in the organization and operation of the education system.

THE EDUCATIONAL SYSTEM

Organization

All aspects of the education system's organization and operation come under the supervision of the Ministry of Public Education except for the universities, certain state institutions, and professional schools. The former two exceptions may be granted autonomy and are thus exempt from the Ministry's control while the latter are often administered and sponsored by the Ministries of Defense, Navy, Agriculture, and Health to train experts in their respective branches.

The Ministry of Education itself has over 30 subdivisions and departments which share and divide the responsibilities of managing education. The Ministry's vast supervising powers include prescribing and coordinating administrative procedures, curricula contents, and requirements for admission, promotion, and graduation from all schools. However, education authorities or the states and municipalities in many cases take responsibility for these jobs, and they are given considerable control within the bounds dictated by the Ministry. Hence, schools are classified according to whether they are controlled by the federal government, by the states and municipalities, or by both.

The federal government maintains institutions at all levels of the education system while individual states and jointly operated institutions are principally concerned with running primary, secondary, and teacher-training schools, though they provide other types of education on a smaller scale. Private operated institutions also maintain instructional facilities at almost all levels.

The private institutions must conform to the government's established standards, as maintained in the public schools, in terms of objectives, programs of study, examinations, et cetera. To ensure that the above requirements are met, the Ministry appoints an extensive staff of supervising inspectors and teaching experts. These supervisors encourage adherence to government standards and higher quality instruction by frequently visiting schools throughout the Republic. Thus, both public and private schools are generally similar in organization and operation, though they differ in their sources of financial support.

Finances for public education comes from federal, state, and local tax revenues. The heaviest burden falls on the former as regards total expenditures in regular allocations, subsidies, and supplemental grants though some states contribute as much as 40 percent of their budget to education. Gifts and donations from interested parties are another source of money. Higher education institutions are given subsidies through the National Association of Universities and the Institute of the Republic in accordance with their enrollments. Some universities have set-up associations of graduates who make annual contributions equivalent to what they had received in scholarship fees when in school. Financial assistance is also received from several international foundations. Between 1961 and 1966 loans totaling US $3.5 million were granted for higher education projects alone by the Inter-American Development Bank. Private institutions receive the majority of their funds from monthly tuition fees paid by students and parents. Sometimes they are given occasional financial aid from the government and often through endowments.

Operation

Mexican schools offer the following levels of instruction: *educación preescolar* (pre-primary), *escuela primera* (primary), *escuela sec-*

undaria (secondary), *preparatoria* (preparatory), and *universitaria* (university). General characteristics of these institutions may be described in terms of length of the academic year, the school day, distribution by sex, curriculum and methods, facilities, costs, student welfare, extracurricular activity, and grading (see fig. 13).

The academic year in Mexico is about 200 days long as compared to 160 in the United States. The months spent in school vary according to whether the institutions are located in temperate zones (*tierra templada*) or warm zones (*tierra caliente*) (see ch. 2, Physical Environment). In the former, classes begin the first week in February and continue through the last week in November with recess during December and January. In the latter, school opens in September and continues through June with 2 months of vacation during July and August. In both cases, schools are closed for at least 15 days during the year due to national holidays and religious celebrations. Higher education schedules vary but most institutions follow the National

<table>
<tr><th>STUDENTS AGE</th><th colspan="4"></th><th>YEARS OF SCHOOLING</th></tr>
<tr><td>2</td><td colspan="4" rowspan="2">NURSERY SCHOOL</td><td></td></tr>
<tr><td>3</td><td></td></tr>
<tr><td>4</td><td colspan="4" rowspan="3">KINDERGARTENS</td><td></td></tr>
<tr><td>5</td><td></td></tr>
<tr><td>6</td><td></td></tr>
<tr><td>7</td><td colspan="4" rowspan="6">PRIMARY SCHOOLS</td><td>1</td></tr>
<tr><td>8</td><td>2</td></tr>
<tr><td>9</td><td>3</td></tr>
<tr><td>10</td><td>4</td></tr>
<tr><td>11</td><td>5</td></tr>
<tr><td>12</td><td>6</td></tr>
<tr><td>13</td><td rowspan="3">SECONDARY SCHOOL FIRST CYCLE</td><td rowspan="5">PREPARATORY SCHOOL</td><td rowspan="6">NORMAL SCHOOL</td><td rowspan="11">VOCATIONAL AND TECHNICAL SCHOOLS</td><td>7</td></tr>
<tr><td>14</td><td>8</td></tr>
<tr><td>15</td><td>9</td></tr>
<tr><td>16</td><td rowspan="2">SECONDARY SCHOOL SECOND CYCLE</td><td>10</td></tr>
<tr><td>17</td><td>11</td></tr>
<tr><td>18</td><td rowspan="6">UNIVERSITIES</td><td rowspan="6">HIGHER VOCATIONAL AND TECHNICAL SCHOOLS</td><td>12</td></tr>
<tr><td>19</td><td rowspan="5">HIGHER NORMAL SCHOOL</td><td>13</td></tr>
<tr><td>20</td><td>14</td></tr>
<tr><td>21</td><td>15</td></tr>
<tr><td>22</td><td>16</td></tr>
<tr><td>23</td><td>17</td></tr>
</table>

Figure 13. Generalized levels of education in Mexico.

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University which conducts two semesters, the first from March through June, the second from July through October with the remaining months corresponding to Mexico's summer in most areas.

Primary and secondary school days are usually 6 hours in length with classes being held from 8 to 12 and from 3 to 5. However, the 3-hour *siesta* between these hours is being replaced in many regions with double sessions to accommodate more pupils. At the secondary and higher levels, classes are frequently held during the late afternoon and evening hours, depending on the students' schedule.

Distribution by sex is about even at the primary level while in secondary and higher level schools, men outnumber women, particularly in the latter. The sexes are usually separated after the fourth primary year in deference to local choice and prevailing religious faith except where numbers of students or insufficient buildings and staff make segregation unfeasible. The same curriculums and teaching methods are used for both female and male pupils although emphasis is placed on specific subjects proper to either sex.

CONTENT AND METHOD

Throughout the education system, uniform courses of study are to move at the same pace and cover the same material. However the uniformity does not cause curriculums to be inflexible and adaptations to local conditions are encouraged. Prescribed primary courses include geography, history, civics, natural science, arithmetic, geometry, drawing, music and singing, physical training, manual work (for males), and domestic economy (for females). Many of these courses are amplified and specialized at the higher levels.

Teachers try to relate the above compartmentalized subjects to everyday life and to national objectives. The "learn by doing" method is employed and students are taught to do things that will benefit themselves as well as the community. For example, in rural areas, many schools have *parcelas escolares* (plots of land) where elementary agricultural techniques are taught. New methods of programmed instruction are being used in several areas and traditional teaching aids such as films, models, and maps are utilized in most schools. The lecture method prevails at the higher levels though discussion groups, seminars, and individually directed research are offered on a smaller scale.

The quality and type of facilities vary tremendously at all levels of the system going from single-room adobe buildings to some of the most modern educational structures in the world. Generally, facilities, furniture, and equipment are inadequate. The climate is not severe so heating and ventilation problems seldom occur and building construction is less expensive. Mild weather also allows open-air classes to be held in large patios which are a common feature of Mexican schools.

Since public schooling is legally free, the cost of education to pupils and parents is low. Nominal fees are sometimes charged at the primary and secondary level if families can afford it. Parents Associations, cooperating with school officials, often establish low annual enrollment fees to help maintain their local schools which are invariably short of funds. Public higher education is also free except for token fees. Students must buy their own school supplies, excluding textbooks at the primary level supplied by the state. Private institutions charge tuition fees of varying amounts. They are required by law to admit 5 percent of their pupils free on the basis of scholarship grants for those unable to pay.

Both public and private schools provide scholarships, loans, and prizes on all levels of the system. Some scholarships give direct monetary grants to poor and worthy students while others provide room, board, school supplies, or exemption from fees. Other forms of student welfare include health services and vocational guidance programs. Primary and secondary schools usually have health clinics and an increasing number carry on physical fitness activities. Higher level institutions offer extensive medical services and physical checkups are an admission prerequisite. Vocational guidance centers are numerous in the Federal District and are becoming less rare in other regions. Counseling is accompanied by pamphlets describing the aptitudes and academic requirements necessary for various careers.

Extracurricular activities are limited to holiday camps and excursions in most primary schools. Private clubs and associations are popular at the intermediate and higher level as is participation in school government. Interests of student groups involve political, social, academic, musical, and athletic activities, and service clubs carry on community welfare projects. Though there are no fraternities or sororities, some university student-run organizations have regional and national representation and influence.

Grading is based on a scale of 1 to 10 or 1 to 100 with 10 and 100 representing the highest possible marks. The lowest passing grade is 6 or 60. Examinations are usually held prior to vacations or at the close of a term. Psychological tests are being used more frequently in all schools for diagnostic purposes. Examinations play an essential role in determining students' achievement and readiness for advancing from lower to higher levels of the educational system.

Primary Education

Pre-primary is the lowest level of Mexican education. It is available on a limited basis for children from the ages of two through six. Preschool education emphasizes early hygienic and emotional training via singing, dancing, games, and physical, artistic, and other activities. The two divisions of pre-primary education are *guarderias infantiles* (nursery school) for ages two through four, directed by the Ministry of Public Health and *jardines de niños* for ages four through six, directed by the Ministry of Education.

At age six a child enters primary school which ideally lasts for 6 years. The primary school curriculum is comprehensive and stresses total personality development intellectually, socially, aesthetically, and physically. Facilities are classified according to whether they are urban, rural, boarding, or "123 schools." Urban and rural institutions are geared to their respective environments; boarding schools are for pupils living great distances from available day schools, and 123 institutions (named for the constitutional article creating them) are sponsored by large employers for their employees children.

The program for all primary schools is divided into three cycles of 2 years and the contents of the first cycle are enlarged and intensified in the succeeding cycles. The cycles attempt to give every child as much knowledge as possible during the first 2 years since the majority of pupils never reach the upper cycles. Students that do complete the sixth year are granted certificates allowing them to move up to the secondary level.

Secondary Education

The two main types of secondary education are *secundarias* and *preparatorias.* Both types of schools emphasize cultural development of students, as described for the primary level, in addition to preparing them for vocational and technical careers or for higher level studies.

In *secundarias* the program usually lasts 3 years. After completing the third year, students may receive terminal certificates or go on for 2 years of additional training in vocational, agricultural, military, nursing, normal, and other types of schools. The *preparatoria* training lasts 5 years and is administered by universities instead of the Education Ministry since their purpose is to prepare students for higher level studies. Upon successfully completing the program, students are granted a *bachillerato* (bachelors degree; Mexican degrees should not be confused with the ones conferred in the U.S. For example, the Mexican bachelor involves 11 years of work while the degree by the same name in American institutions requires 16). With a *bachillerato,* students may begin working in their chosen career or go on to the universities or higher technical schools.

Higher Education

Higher level education usually lasts from 3 to 7 years and offers a wide range of study opportunities. The center of higher education is the National Autonomous University and almost all state and private universities are affiliated with and follow the National University's organization and operational structure.

The universities are organized into faculties, schools, and research institutes. Faculties grant professional titles and the academic degrees of *maestro* (masters) and *doctorado* (doctorate). Faculties also have the classical meaning, namely, a group of professors in a teaching division of the university. Schools offer studies leading to professional titles though they do not normally grant degrees. Research institutes are composed of groups of investigators who carry out research in both the sciences and humanities.

Unlike the preceding levels of instruction, where control rests in the hands of Education Ministry officials, the autonomous universities have their own administrative board and are free from government control. The National University is run by a governing board, the rector, a university council and a financial committee. The governing board has final authority and control of the university and elects the rector, who corresponds to the president of a college or university in the United States. The rector presides over the university council composed of directors from the faculties, schools, research institutes, and delegates from the faculty and students. The university council has jurisdiction over administrative and academic problems not delegated to the governing board. The financial committee handles university budgets and finances.

The purposes of higher education are to produce professionals and trained specialists (general education is the responsibility of the primary and secondary schools), to extend the benefits of Mexican culture as widely as possible, to carry out research, and to analyze national conditions and problems, working toward solutions to the latter.

At the National University, architecture, medicine, and law are the most popular subjects. Many of the 29 states have public universities whose fields of specialization mirror the needs of the region in which they are located. The government maintains a number of higher institutes, notably the National Polytechnic Institute. These schools specialize in practical technical and vocational fields such as mechanical engineering. Other important higher education institutions in Mexico include the National School of Anthropology and History and the Institute of Health and Tropical Diseases.

The quality and quantity of work required for degrees from the numerous higher education institutions vary considerably from school to school and from department to department. Generally, requirements for the masters degree are a bachelor degree, specified course examinations, and a thesis. The doctorate requires a masters degree, prescribed courses and seminars, foreign languages, examinations, and a thesis.

Other types of school institutions include those for adults and for special children. Adult education is carried out through the urban, rural, and Indian literacy centers, cultural missions, and night schools.

A limited number of special schools, sponsored by the Ministry of Education and Public Welfare, are in operation for blind, handicapped, retarded, and abnormal children.

Private Schools

Private schools account for about one-fourth of all Mexican educational activity. Their organization and operations, by law, follow the patterns of the public schools from pre-primary through the higher levels. Private institutions play a valuable role in supplementing the public schools education offerings since the latter's resources are unable to meet the needs of society.

Religious groups sponsor literacy programs and schools at all levels and many of these institutions have gained reputations for high intellectual standards and achievements. American, British, German, and French-run schools also operate in Mexico. These schools offer the children of foreign businessmen, diplomats, and staffs of international organizations a chance to prepare for schools outside of Mexico as well as giving additional educational opportunities to Mexicans.

Notable private schools include the Institute of Technology and Higher Studies at Monterrey and the University of the Americas in Mexico City. The Institute is patterned after the Massachusetts Institute of Technology and is sponsored by local businessmen and industrialists who benefit from the skilled manpower provided by the school. The University was founded in 1940 as an extension of the American School Foundation (a high school mainly for the children of American residents in the country). Today it offers bachelors and masters liberal arts degrees with specialties in hispanic studies, archeology, and art. The school is on the quarter system and the summer quarter has become popular with students from the United States.

Teacher Training

Students who have graduated from primary school and who desire to become teachers are given aptitude tests and interviews. When admission requirements have been met they may enter either a rural or urban *escuela normales* (normal school). Both programs last 6 years and cover three cycles, intermediate general education, general professional training, and specialized professional training. Students may choose between several specialties to become kindergarten or primary teachers, physical training instructors, or teachers of abnormal children. Special normal schools are provided for the latter two choices.

he distinction between urban and rural normal schools is mainly of orientation toward the needs of either city or country children. wever, graduates from urban normal schools may teach anywhere the nation while rural normal graduates may only teach in rural ions unless they receive further training.

Students, if they wish to teach at the secondary level, go into edu- ional administration or earn a doctorate in education, enter an *uela normal superior* (higher normal school). Admission requires liploma from a lower normal school or a bachelor from a prepara- y school with 4 years of teaching experience at the primary level. er a dozen fields of specialization are offered, such as world history, ics, chemistry, and physics. Students' programs usually last 4 years d include both general and particular courses in their chosen fields specialization. The higher normal school grants specialized degrees education but the masters and doctorate in subject fields are con- red only by special arrangement with the National University.

To teach at the highest levels, a masters or doctorate is normally quired, though there are no uniform procedures for choosing pro- ssors. The official head of the institution or an administrative board y make an appointment while in other universities competitive ex- inations determine the selection.

Mexican teachers studying in other countries is one aspect of the public's large scale teacher training program.

Qualified teachers at pre-primary, primary, and secondary levels e placed on an official scale for budgetary purposes, and salaries as ll as promotions are regulated according to a specifically defined stem though in practice, salaries tend to be higher in the Federal strict than in outlying regions, and municipalities often determine eir own standards of payment. The amount of salary depends on e teacher's credentials and upon whether they work full-time, half- ne, or part-time. At the higher levels, part-time and half-time in- uctors are more common than full-time teachers, in which case ey are paid according to the number of hours they teach instead of the month. In the past, teachers salaries have been generally lower an the wages of their similarly educated counterparts in other pro- ssional fields; however, in the last 10 years pay increases have made achers salaries more competitive.

All state and most private institutions have teacher pension funds. nsions are proportional to the length of time the instructor has ught. Pensions usually begin at 40 percent pay (the average salary er the last 5 years) after 15 years of service and end with 100 per- nt salary after 30 years of service.

Practically all Mexican teachers belong to union organizations such the National Union of Educational Workers. The unions promote teacher welfare, retirement, and fringe benefits such as hospitalization and accident insurance and *sobresueldos* (bonuses). They exert influence over the government's salary scales, encouraging higher pay. Indirectly the unions help attract growing numbers of primary graduates into the profession through their often successful efforts to increase benefits and salaries for teachers.

CHAPTER 10

RTISTIC AND INTELLECTUAL EXPRESSION

Mexico, perhaps more than in any other Latin American country,
tic and intellectual expression has been a reflection of the coun-
history through the attempt by its artists and intellectuals to
lish a national identity, a sense of uniqueness. The pride of Mexi-
in their history is evident in all the arts. They sing of Revolu-
ry heroes; they retain traditional dances, many of which
porate their Indian and Spanish heritage. Sculpture, architec-
and contemporary painting emphasize pre-Columbian Indian
tions. Philosophers have sought to reinterpret Indian thought.
pride is not insular, however; Mexican artists and thinkers have
open to European and North American influence and have
ted them to fit Mexican needs.

cause of its strong association with history, artistic and intel-
al expression has tended in the 20th century to focus on social
lems rather than universal questions. The dominant theme has
the Revolution of 1910 and its aftermath, for it was with the
lution that a national character emerged. Revolutionary goals and
s were the principal subjects of writers during the first decades
e century; the betrayal of these goals and ideals occupied them
ome time thereafter. They were deeply concerned with the In-
's place in Mexican society, first decrying his exploitation during
Revolution and later treating problems of incorporating him into
rn society. Painters and sculptors also treated social, economic,
political subjects inspired by the revolution, reflecting the society's
ification with its past and the people's strong sense of nationalism.
osophers examined human conduct rather than theories of knowl-
becoming intimately concerned with the revolutionary tradition
he spread of nationalism.

the national identity became more firmly established, creative
ession began to include other subject matter: with increasing mod-
ation in the country, the clash between traditional and modern
s started to occupy attention. Intellectual and artistic pursuits
also been modified in recent times by the special interests of the
y. The Indianist movement, for example, has promoted interest
d support for archaeological research into pre-Columbian civiliza-
The doctrine of the Roman Catholic Church, the church of

virtually all Mexicans, has influenced the social and physical sciences, tending to promote interest in philosophical rather than empirical quesitions.

Artists and intellectuals are highly regarded by the Mexican people. The government has contributed much to their support. Painters and architects are often commissioned by the government; actors and dramatists are supported by means of a number of national theatrical organizations. The Ballet Folklorico has received active government encouragement. In 1961, a Center for the Experimental Arts was founded in Mexico City. Schools have been established by the government in various parts of the country for the training of painters and sculptors.

Intellectuals are closely associated with the government through their policy-making functions. Their influence in government is generally greater than that of their counterparts in many European countries. Economists in particular have played important roles since the 1930's. Many intellectuals teach part time at the university level; their occupations outside the university—whether in business, law, banking, or government—provide them with influential contacts throughout the society and they serve as a bridge between society and the university.

There is a large degree of occupational and professional diversification among artists and intellectuals. These groups display a high degree of unity and of autonomy in their dealings with the rest of society. The central focus of artistic and intellectual activity is the National University in Mexico City. Many artists and intellectuals are in vigorous communication with their counterparts throughout Latin America, Western Europe, and the United States. Many have traveled extensively, which lends to the artistic and intellectual community an air of cosmopolitanism. American and European universities welcome Mexican artists and scholars as visiting lecturers and professors.

LITERATURE

Mexico's literary tradition begins with the poetry and sacred writings of the Maya and Aztec civilizations. Parts of the *Popol Vuh* (sacred writings of the Maya) survive as do fragments of poetry written by Nezahualcoyotl, the 15th century king of Texcoco. A good deal more literature is believed to have existed; most, however, was destroyed by colonial churchmen on the grounds that it was inspired by paganism and retarded the progress of the Indians toward Christianity.

The most important literary work of the early colonial period was *The Chronicles of Bernal Díaz de Castillo*. A firsthand account of the conquest, it is rich in description and accurate in detail; it remains one of the best and most colorful sources of information on the conquest of Mexico.

Most extraordinary of all literary colonial figures was perhaps Sor ana Ines de la Cruz. Born in the late 17th century near the Capital, e became a nun at 18. She wrote verse, secular and religious plays, d essays on the laws of nature and studied astronomy and music. e collected a library of 4,000 volumes and her cell became a gather-g place for the most distinguished and learned people of New Spain.

Colonial literature was in the tradition of Spain almost entirely in th style and subject matter. Toward the end of the colonial period, ere was increased stylistic influence introduced from 18th century rench literary circles. During the 19th century, the influence of rench Romanticism was marked. Romantic novels were extremely pular; historical novels were almost unknown. Poetry was almost tirely dominated by French influence.

Of the large number of Romantic novelists in the 19th century, the llowing were perhaps the most dominant: Adolfo Isaac Alegría, rescencio Carrillo y Ancona, Pedro Castera, Manuel Martínez de astro, Vicente Morales, José María Roa Barcena. Although the out-t of most of these novelists was relatively small, they all made con-derable impression on the French-dominated literate community of e time.

With the Revolution (1910–1917) came the beginning of a uniquely exican literature. Realistic novels appeared treating themes of social rotest, the heroism of revolutionary figures, and the Indian not as cal color but as the central character in Mexican development. Poetry, nlike the novel, broke away more slowly from European influences. lthough some poems treated social disaffection, many still reflected e concerns of French Romanticism.

Mariano Azuela (1873–1952) initiated the novel of the Revolution 1915 with *Los de abajo* (*The Underdogs*), which, by realistically ortraying the exploitation of the Indian, made the Indian the prime cus of the revolutionary movement. Martín Luis Guzmán (b. 1887) ntinued the novel of the Revolution into the 1920's with *El águila la serpiente* (*The Eagle and the Serpent*), telling of the adventures f such revolutionary heroes as Pancho Villa.

The revolutionary fervor which produced novels of social protest egan to wane in the 1940's. Younger novelists began exploring new chniques. José Revueltas (b. 1914) used the stream of consciousness chnique in *El luto humano* (*Human Grief*), published in 1943, to tell e story of a group of Mexican peasants trapped by floods. The era f revolution had not been forgotten, however. In *Al filo del agua* (*The dge of the Storm*), published in 1947, Agustín Yañez conveyed the nguish of a church-dominated Indian town on the eve of the Revo-tion. Since then he has written novels on Mexican society both before nd after the Revolution.

Although the early revolutionary social protest is not as vigorous, the Revolution continues to provide subject matter for Mexican novelists. In *Pedro Páramo*, Juan Rulfo (b. 1918) tells of a young man returning to his village in search of his father Paramo—*páramo*, wasteland—alludes not only to the barren setting of the novel but perhaps to the sterility of the prerevolutionary period. The father, deposed by the Revolution, had been a *cacique*, a man of much influence and power over a large region. Rulfo speaks of man's relationship with his past—the past in this case being the Revolution, which to many Mexicans marks the emergence of their national and unique identity (see ch. 12, Social Values; ch. 17, Political Values and Attitudes).

In the 1950's and 1960's, the social protest themes of the early revolutionary period have evolved into criticism of those who would betray revolutionary ideals. *La muerte de Artemio Cruz* (*The Death of Artemio Cruz*) by Carlos Fuentes (b. 1929) chronicles the deathbed thoughts of a fighter in the Revolution who has prospered at the expense of his revolutionary ideals by exploiting others. One of Fuente's earlier novels, *Las buenas conciencias* (*Clear Consciences*) published in 1959, focuses on the same theme through the story of a man who grows to manhood and is corrupted during the period just before and during the Revolution.

Other present-day novels attack corruption through the presentation of a gap between generations. The young are often presented as pure and honest, while the older characters are corrupt, dogmatic, or life-denying. Many novels treat the dilemma presented by the coexistence of traditional and modern societies: the values of the closed Indian communities inevitably clash with those of the modernized, urban middle class (see ch. 12, Social Values).

Mexican poets broke away from French Romanticism more slowly than novelists. The first to make the break, and the most widely recognized contemporary poet, is Octavio Paz (b. 1914). He has been deeply influenced by translations of Aztec religious poetry. His early poems consider the nature of creation and the unconscious sources of poetry, which he later identified with pre-Columbian sources. His most famous poem, "Piedra de sol" ("Sun Stone"), treats history as a cyclical process; the sun stone on which the Aztec calendar was inscribed is an integral part of the Mexican historical cycle.

Since 1945, Mexican poetry has followed along lines developed by Paz but with considerable independence of style and theme as well. Ali Chumacero (b. 1918) treats themes of nihilism and frustration. Jaime Sabines (b. 1925) speaks for the transitional Indian caught in the confusion and mercilessness of city life, yet dominating it through the force of his legends. Rosario Castellanos (b. 1925) also speaks om the Indian's point of view. Antonio Montes de Oca (b. 1932), ɩe Paz, is concerned with the nature and sources of poetry.

While Mexican folk drama continues to emphasize traditional Inan themes, the lives of religious saints, and Church rituals, much of odern drama shares with postrevolutionary novels and poetry the emes of social protest and the problems of man in the modern world. search for a national identity or character has been the subject of me playwrights while others have concerned themselves with the fects on man of modernization and changing values. European and orth American influences are to be found, especially in stylistic and roduction innovations.

The modern theater in Mexico had its inception in 1928, with the undation of the Teatro Ulises, an experimental group of dramatists. hese men, important not only in their own right but also as teachers f the present generation, include Xavier Villaurrutía, Salvador Novo, d Celestino Gorostiza. Gorostiza's work focuses on an exploration d definition of the Mexican character. Many consider his *Corona de mbra* (*Crown of Shadows*—1945) and *El gesticulador* (*The Gesticlator*—1947) among the best productions of the contemporary Latin merican theater.

Since World War II, interest in the drama has increased markedly. he Department of Theater of the National Institute of Fine Arts, e School of Dramatic Arts, and National Theater Festivals have l been founded since that time. Probably most famous of contemporry dramatists is Emilio Carballido, whose output ranges from *Rosba y los Llaveros* (*Rosalba and the Llavero Family*—1950), which troduced to Mexican audiences the possibility of treating serious roblems in a comic fashion, to *Medusa* (1965), a complex vision of an's spiritual death in the modern world.

Other important members of the current group of dramatists include uisa Josefina Hernández, Sergio Magaña, Elena Garro, and Carlos lórzano. Hernández is concerned with provincial life, the role of omen in Mexican society, and of late, social criticism. Magaña is ted for unusual experiments in form. Garro is closely related to e theater of the absurd. Solórzano, influenced by French playrights, has moved towards a concept of total theater, which is the cus for his vision of man's eternal struggle against human and cosic repression.

MUSIC AND THE DANCE

Music has long been preeminent in Mexican culture. The Aztecs ssessed a variety of instruments; those which have been discovered cently indicate the ancient tribes knew of harmony 200 years before evolved in Europe. Aztec composers and musicians were part of the aff of a palace. When the Spaniards introduced stringed instruments, the Indians showed great eagerness and aptitude in learning to play them.

Today, a guitar appears at almost any gathering. Almost no village, however small, is without a band. *Mariachis* (wandering musicians dressed as *charros* or Mexican cowboys) and *marimba* (a percussion instrument similar to the xylophone) players are present at markets, celebrations, and private parties. *Corridos*, or ballads, tell of tragic love affairs, catastrophes, or the exploits of revolutionary heroes and bandits—the assassination of Madero, the pursuit of Pancho Villa, or the killing of Zapata. History and news events thus are told in music for the illiterate thousands. Radios and jukeboxes are common and transmit not only Mexican music but popular music derived from European and North American sources. Popular composer Agustín Lara and singer Pedro Vargas are internationally known.

The National Symphony orchestra has a repertoire of European classical compositions but specializes in music of contemporary Latin American composers. The most influential contemporary Mexican composer is Carlos Chávez (b. 1899), who has produced nationally inspired music distinct from the European concept of nationalism in music. Chávez' nationalism is of a social character, born of the Revolution. He uses revolutionary songs in his scores and attempts to accentuate the Indian contribution of Mexican music. More recent composers, such as Daniel Ayala (b. 1908), Blas Galindo (b. 1911), Salvador Contreras (b. 1912), and Pablo Moncayo (b. 1912) have remained attached to the nationalist and revolutionary tradition begun by Chávez.

The dance in Mexico has also been highly nationalistic in character. Many traditional Indian dances survive, such as Los Viejitos (The Little Old Men) and the spectacular Los Voladores (The Flyers). In the latter, five men costumed as hawks leap from a tall pole to which they are tied, and, as the ropes unwind, the men appear to be flying to the ground. Other dances combine elements from the country's history. The feather dancers of Oaxaca dance and act stories of the conquest. Another dance, reflecting Spanish influence, depicts the struggle between the Moors and the Christians. The Shell Dancers of the central plateau dance to honor the four winds and also the *mesa santa* (communion table). The national folk dance, the *jarabe tapatío*, is a heel and toe rhythm dance which ends with the music of the bullfight. The widely acclaimed Ballet Folklórico of Mexico City, which has toured internationally has incorporated many of the traditional Indian folk dances into its repertoire.

PAINTING, SCULPTURE, AND ARCHITECTURE

Mexican painting has found highly developed expression in the form of murals; its roots are in the murals of Aztec and Maya pyramids. Mexicans explain the development of the mural as an ttempt by the artist to communicate significant ideas in artistic orm to the common people. Painting is for the purpose of public nformation, not for private amusement: portraiture, for example, has been little developed. The subjects of murals are the lives of the people, often at a dramatic and desperate pitch. Revolutionary heroes are depicted at their moments of crisis; Indians at their moments of despair. In execution, the Mexican muralists have been influenced greatly by the French schools of cubism and impressionism.

Muralist art is an expression of nationalism inspired by the Revolution. This expression has involved the rediscovery of subjects and techniques from the pre-Columbian Indian traditions, their blending with Hispanic ideals, and their adaptation to contemporary trends. Shortly after the outbreak of the Revolution, José Vasconcelos, Minister of Education under President Obregón, organized the first official support that made the development of the muralist movement possible. From this movement emerged three outstanding figures: Diego Rivera (1886–1957), David Alfaro Siquieros (b. 1896), and José Orozco (1883–1949).

Diego Rivera, best known for his murals in the National Palace of Mexico, was the first Latin American painter to receive international recognition. In subject matter, he exalted the Revolutionists, the Indian, and the Mexico of the Aztecs; he vilified the representatives of capitalism, the church, and the conquest. In style, his work ranges from impressionism to surrealism, through many intermediate stages.

David Alfaro Siquieros is known as the foremost innovator in contemporary Latin American painting techniques. His murals depict political and economic views; his characters are often symbolic and are portrayed in highly dramatic settings. He is of the opinion that easel painting, because of its size, is an outworn and selfish mode of artistic expression; he believes that painting should be for the masses and not for any particular elite. Among his most notable works are *Retrato de la burguesía* (*Portrait of the Bourgeoisie*) located in the Electricians' Union headquarters, and *Por una seguridad completa y para todos los Mexicanos* (*In behalf of Complete Security for all Mexicans*) located in the Social Security Hospital in Mexico City.

The third of the famous muralists, José Orozco, first dedicated himself to social caricature. In a 1916 exhibition he portrayed a sick society of dwarfs, cripples, and prostitutes in need of transformation through the work of revolutionary heroes. In 1923 he painted his greatest mural depicting the symbolic trinity of peasant, worker, and soldier. His later work concentrates on the tragic and cruel aspects of life, often depicting events of desparate energy during the revolutionary struggle. These themes are particularly apparent in his mural at the National Preparatory School in Mexico City.

The major figure in contemporary Mexican painting is Rufino Tamayo. Although he has worked as a muralist, he is primarily an easel painter. He is less nationalistic than his predecessors and rejects what he considers to be an artificial display of folklore, revolution, and propaganda. Instead, Tamayo expresses his nationalism by looking for what is uniquely Mexican in ancient art and architecture, in Indian uses of proportion, balance, and color. In his mind, a nationalism that rejects outside influences or that uses art as propaganda hinders the development of both artist and nation.

Mexican sculpture emphasizes traditional Indian stylistic forms and subjects. It has been influenced to some extent by recent European trends, but its most important influence remains pre-Columbian Maya and Aztec statuary. As with many of the other arts, the Mexican sculptor is concerned with creating a uniquely Mexican style and subject matter. Perhaps more so than other artists, however, the Mexican sculptor is concerned also with appealing not just to his countrymen but to an international art public as well.

The most famous sculptors have produced their work since the Revolution and include Ignacio Asunsolo (b. 1890), Francisco Zuñiga (born in Costa Rica in 1913), Arenas Betancourt (born in Colombia in 1919), and German Cueto (b. 1893). All have attempted to give expression to the pre-Columbian past in stone, metal, and terra-cotta. Mathias Goeritz (born in Germany in 1915) has especially contributed to the international reputation of Mexican sculpture, particularly in his work since 1949.

Architecture has been one of the most active and controversial of the arts since shortly after the Revolution. Especially since 1930, there has been much controversy between nationalistic architects, who seek to maintain an indigenous and traditional style in their creations, and functionalists, who desire to spread modern styles and techniques throughout Mexico. Most of the work carried out by the government since 1945 has been entrusted to private architects, and it is here that functionalism predominates—although sometimes the functionalism is difficult to recognize underneath the decorative murals.

The modern era in architecture began in 1929, when Juan O'Gorman built in the style of the French architect Le Corbusier a combination house and studio for muralist Diego Rivera. Since then Le Corbusier's theories have been combined with pre-Columbian patterns, particularly in the area of low-cost housing. Considerable innovation has been the result of the work of Pedro Ramírez Vázques in the production of rural prefabricated school buildings between 1958 and 1964; schools can now be produced rapidly on an assembly line. The National University (1953) in Mexico City was the work of many architects and emerges as a blend of styles; it is considered by many to be outstanding in its architectural design.

The functionalist-nationalist contradiction seems to be on its way to resolution, as exemplified by the National Anthropological Museum in Mexico City, completed in 1964 by Pedro Ramírez Vázques, Rafael Mijares, and Jorge Campuzano. This edifice succeeds in blending functionalist appeal with expressions of Mexico's past. Mexican architects are experimenting with new styles and techniques: concrete shells, for example, have been used both for factories and churches.

Coexisting with modern trends in painting, sculpture, and architecture are the traditional handicrafts. Especially well-known internationally are the ornamental tiles and onyx art objects from Puebla, the black pottery of Oaxaca, and the variety of silver items produced in Taxco. Among most groups, the production of handicrafts has changed little since before the conquest; Indians in Taxco have been making silver and turquoise jewelry since the 15th century.

INTELLECTUAL EXPRESSION

Prior to the Revolution, most Mexican philosophical thought tended to serve the needs of church, state, school, or industry. It is with Antonio Caso and José Vasconcelos that 20th-century Mexican philosophy, as an independent field of inquiry, began. Both Caso and Vasconcelos were influenced by French philosophers Blaise Pascal and Henri Bergson. Caso's Christian philosophy of the world attempts to resolve strains in the Bergsonian philosophy. Vasconcelos' efforts were directed toward developing a harmonious mystical philosophy.

Historically, Mexican philosophy was conditioned by a number of factors different from those which affected most of Western Europe (except Spain) and North America. Indian preconceptions retained a considerable hold in Mexico. In addition, the theological doctrines of the Counter-Reformation encountered no philosophical challenges. Enlightenment thought, which spread across Europe in the 18th century, did not reach Mexico until the latter part of the 19th century; when it did arrive, it was in a form much diluted with Romanticism.

Mexican philosophical effort expresses itself in the search for political, social, and artistic goals and ideals. It is not as much concerned with problems of phenomenology, epistomology, or methodology as is Western European and North American philosophy. Mexican philosophy tends toward a tragic view of life in which the individual is perceived as being in eternal conflict with himself and the world around him. This conflict cannot be resolved and the individual cannot win. Man must find his place between the conflicting elements of circumstance and the needs of his own personality. Mexican thought is thus dominated by problems of human conduct, not by problems of knowledge. Philosopher Francisco García Calderón argues that the enduring philosophical ideas in Mexico are social in kind.

Caso and Vasconcelos, influenced by French Romantic philosophy, dominated philosophical thought from 1900 to 1925. Since that time the dominant influence has been the Spanish philosopher José Ortega y Gassett, as interpreted by Mexicans Samuel Ramos and José Romero Muñoz. Ortega y Gassett provided the conceptual framework for the attempt by the generation of philosophers coming out of the Revolution to develop a uniquely Mexican philosophy of life. Ortega y Gassett's perspectivism argues that each nation must produce a unique philosophical image of its own values and consciousness, its ideals and aspirations, its system of social and political thought. Mexican philosophers continue to attempt to interpret the tenets of Ortega y Gassett to fit Mexican needs.

Other currents of contemporary philosophical expression suggest that there is a trend toward wider integration of Mexican thought with American and European materialist philosophy. It is likely that increasing attention will be paid to pragmatic and empirical philosophy as economic conditions in the country improve. As social problems are resolved, the social content of Mexican philosophical thought will give way to broader, more universal considerations.

Humanities faculties exist in many of the country's 30 universities (see ch. 9, Education). Degrees are granted in music, architecture, art (including painting and sculpture), literature, and history. The humanities continue to operate under scholastic methods of instruction which emphasize memorization; teaching centers around a lecture rather than a tutorial system. A notable exception is the internationally respected work in anthropology and archaeology centered at the National University and the National Anthropological Museum in Mexico City. Much empirical research has been carried out in the area of pre-Columbian civilizations. Students from all over the world are attracted to the National University to take part in this program.

The social sciences (with the exception of anthropology) are metaphysical rather than empirical in orientation. Sociology is influenced to a large extent by the metaphysical German school. Political science emphasizes the history of Western political thought. Medieval thought is studied closely, especially that of St. Augustine and St. Thomas Aquinas, reflecting the influence of Roman Catholicism in the country. The field of economics is particularly forward-looking: the problems of modernization are studied and training is given in practical policy decision-making, business enterprise, and banking. History is concerned with the development of Western civilization generally and Latin American civilization in particular. Special emphasis is placed on the history of Mexico since the time of Independence.

The physical sciencies are not as empirically oriented as in Europe or North America; little original research is done. With increased laboratory space and modern facilities, especially at the university level, it is probable that an empirical approach will begin to develop.

CHAPTER 11

RELIGION

In most sections of Mexico, Roman Catholicism, the predominant faith, is somewhat mixed with pre-Conquest indigenous religions. This fusion manifests itself in beliefs and practices that are often far removed from orthodox Catholic dogma.

Religion in remote areas tends to pervade all aspects of life, while in urban areas the tendency to isolate religion into just another segment of living is often evident, thus decreasing the influence of religion in extra-spiritual affairs.

Contemporary Catholicism in Mexico must contend with a myriad of problems including inter-ecclesiastic disagreements and a lack of priests. Also, there is the task of trying to keep Church traditions, beliefs, and values intact yet relevant and viable in a society of rapidly rising population, changing social structures, and increasing secularization. Despite and partially because of the problems and handicaps faced by the Church, its activities have greatly increased in the last 20 years and today Catholicism is in many respects more robust in Mexico than in any other Latin American country. Construction of new churches, numerous religious processions and pilgrimages, flourishing religious orders, and seminaries and schools attest to Catholicism's vitality.

Minority religions in Mexico are also prospering. Early Protestants, Jews, and others confronted religious rancor from many Catholics who thought of them as foreign invaders. Gradually much of the hostility subsided as leaders of the various sects and Catholicism decided that they should work together to combat widespread religious indifference instead of each other. In 1968, special joint Catholic-Protestant worship services were held, reflecting the increased cordiality and cooperation between religious groups in Mexico.

The impact and importance of other religions is relatively slight compared to the influence of Catholicism. The Church has played a paramount role in shaping Mexico's cultural heritage and history from the Conquest's earliest days to the 20th century.

Usually the tallest and most impressive structures in cities, towns, and villages are the churches. Their bell towers are a majestic and prominent feature of every Mexican cultural landscape along with wayside shrines, crosses, and other religious symbols. Each year is punctuated with holy days and celebrations in which millions of the faithful participate. Besides consoling in times of need and despair and promising life after death, Catholicism's festivals and celebrations allow Mexico's multitudes to temporarily escape the drudgery and toil of mundane life, giving them a chance for self-expression, merriment, and mirth.

The Church has traditionally been conservative and wary of any changes in the status quo that might affect its position and influence. This conservatism has been a potent influence in Mexican historical events.

In the 16th, 17th, and 18th centuries the Church gained great political, economic, and social power which in the 19th and 20th centuries liberals sought to curb. Until recently church activity and revolutionary political activity were incompatible and Mexico suffered years of conflict, violence, and unrest as Church and State vied for power. Eventually the Church was separated from the state but kept under tight state control. In the last 30 years an atmosphere of mutual tolerance has prevailed although the anti-clerical restrictions, such as nationalizing churches and forbidding clergymen to own property, vote, or hold public office, remain in the Constitution.

Church-state relations in mid-1968 were much more amicable than they have been in the past. There were cries from radical Revolutionaries who bemoaned waning anti-clerical law enforcement and feared a revival of Church political power. There were also worried ultraconservative Church leaders who feared a return of the excessively severe anti-clerical measures encated under Calles. But the paramount problem confronting religion in 1968 in Mexico was no longer anti-Church legislation, the majority of which was nominal. Rather it was apathy and lack of actual participation by the pious.

THE CHURCH IN MEXICAN HISTORY

Colonial Period

Attending the spiritual needs of the Spanish conquerors and converting Indians to Christianity were the primary responsibilities of the missionaries who followed the conquistadores to the new world. These spiritual conquerors were usually as intelligent and resourceful as their military counterparts and considerably more compassionate. Beginning their evangelical efforts in 1522, the friars converted thousands of Indians by the end of the century and millions by the end of the colonial period. By that time, all but the most inaccessible natives had at least been nominally Christianized and religion in Mexico was nearly universal.

Various factors contributed to the missionaries' phenomenal success with conversions, including the high character of the early friars,

milarities between Christian and Indian forms of religion and the
pport and cooperation of the government. The early friars were
dicated and intensely religious men who saw the pagan civilization
evil and corrupt. They tried to eradicate such Indian practices as
man sacrifice, and replace them with Catholic dogma taught in
ctrinas (primary schools) and later in secondary schools and uni-
rsities. At the same time they introduced European techniques of
griculture, carpentry, masonry, and weaving along with building
ads, aquaducts, and hospitals. They developed painting and archi-
cture via the countless churches, monasteries, and schools that were
nstructed and they tried to protect the Indians from the con-
uistadores and Spanish settlers.

The missionaries found that many of the Indians' religious cere-
onies, at least superficially, coincided with their own. These
esemblances made the transition from idolatry to Christianity easier.
lso, the friars often built churches directly on top of the pagan
hrines they had just destroyed, thus transferring the attributes of the
ncient divinities to the Catholic figures that replaced them.

A quasi-theocratic government prevailed in Spain at the time of the
onquest, and the Crown ruled the Church as a matter of right,
ranted to it by Papal decree. This arrangement, called *real patronato*
royal patronage), allowed the Crown to make all ecclesiastical ap-
ointments and control Church revenues. In return the Church had
he moral and financial backing of the Crown which maintained the
issionaries in their work and set up the Inquisition to preserve re-
igious unity and punish heresy or treason. The intimate Church-state
elationship in Spain made these crimes synonymous. Thus the Church
ecame not only the dominant religious, economic, moral, and social
orce in Mexico during the colonial period, it also had the important
olitical function of upholding the sanctity of the Crown.

These factors tended to augment the religious and civilizing process
nd hold the country together, but clerical conflicts and crisis were
aused by the lower moral character of the priests who came later and
he enmity between higher and lower clergy. With notable exceptions,
he priests who followed the first wave of friars were not as zealous
r eager to Christianize and help the Indians, but served the spiritual
eeds of the rich Spanish landlords who, upon dying, bequeathed the
riests property, cattle, and large endowments of gold and silver. The
lergy became richer and less conscientious and the increase in wealth
ccompanied a decline in morals. By the end of the 18th century the
hurch owned almost two-thirds of all money in circulation and more
han half of Mexico's land.

Much of the accumulating wealth belong to the secular or higher
lergy who handled administrative responsibilities for the proliferat-
ng parishes set up by the lower clergy. Each secular priest was the

highest civil authority in his village, and *fueros* (clerical immunities) put him beyond the reach of civil courts and invited abuses of power. They were Spanish-born, loyal to the Crown, and loath to the new and heretical ideas of nationalism, liberty, and equality originating in France. The lower clergy were mainly Mexican-born, often *mestizos*, as impoverished as their parishioners, and identified with them. To these men the French ideas did not seem beyond reason or unacceptable. It was two of these lower clergymen, Hidalgo and Morelos, who helped initiate the struggle that eventually led to Mexico's independence.

Independence

The Independence movement was harshly denounced by higher clergy not anxious for a change in the status quo which might endanger their powerful and privileged position. However, a revolutionary movement brought liberalism to Spain in 1820 and consequent intervention in Church affairs which alarmed the ecclesiastic hierarchy in Mexico and caused them to reverse their position.

Independence became a reality in 1821 and brought the relationship between Church and state into the open. Mexico's first independent government acknowledged the state religion to be universally Catholic, and for a time the Church was allowed to maintain its powers and privileges. Yet without the backing of the Crown via *real patronato*, its position was in jeopardy. Many state officials claimed that they should inherit the patronage rights once exercised by the Crown. Churchmen contended that loss of sovereignty by the Crown meant that the Church should be given the powers of patronage. No solutions or agreements were reached but increased anti-clerical feelings caused by intra-clergy conflicts and the envy-arousing wealth of the Church, and the liberal reforms of the American and French Revolutions. Also a growing belief that the Church's affluence and power made it a strong rival political force led Government leaders to begin stripping the Church of its temporal powers.

In 1833 acting President Gómez Farías leveled the first serious attacks on the Church. He secularized education and suppressed the university because it was under ecclesiastical control, allowed members of monastic orders to renounce their vows, declared the payment of the tithe was no longer necessary, and tried to present candidates for parish vacancies as the Crown had under the patronage.

The small but influential and intense group of liberals were impervious to pious protests against Farías' statutes for they were determined to free the nation from centuries of clerical domination. The recently enacted Church restriction measures were followed by others, the *Ley Juárez* (1855), which restricted the jurisdiction of ecclesiastical courts; and the *Ley Lerdo* (1856), which prohibited the Church om owning real property. This was an effort to destroy the economic wer of the clergy by forcing them to sell Church-held lands. Violent otests and condemnation of the new laws poured forth from Church okesmen but did little to curb the increasingly liberal Government's i-clerical moves, and in 1857, Benito Juárez promulgated the new nstitution which set the pattern for Church-state relations for years come.

The Constitution explicitly reiterated the previously stated restric- ns and also declared that members of the clergy were ineligible to ction as President or as national representatives and that governors re to designate the buildings to be used for religious services. Books d objects of art belonging to religious communities were turned over the public museums and religious orders were suppressed.

An avalanche of scathing denunciations followed from the ecclesias- s, who saw the material power of the Church being shattered by the erals. The clergy denied sacraments and even burial to those who d sworn to observe the Constitution. In 1857, a clerical-military alli- ce declared war upon the anti-Church articles. A brutal civil war sued with the liberals struggling for freedom of thought and speech, uality for all citizens, and suppression of clerical power, while the urch and other conservative elements fought to restore their tradi- nal position of authority. As the fighting raged, the anti-clerical vs expanded: sacred ceremonies held outside of churches were for- lden, monastic orders, religious holidays, and the ringing of church lls were regulated. The laws eventually established complete separa- n of church and state.

Despite the ecclesiastics' outbursts of indignation and their desperate litary maneuvering, they saw with chagrin that the Constitutional- s were winning and that the Church was being stripped of all its cient perogatives. Realizing that a counterrevolution was not pos- le using overt force, the clergy tried intrigue and worked for the unding of a monarchy under European protection. This also failed th the execution of Maximilian in 1867 (see ch. 3, Historical Set- g). The anti-Church reform movement initiated by Farías and ex- nded by Juárez and others appeared to have attained its goal by 74.

But it was a temporary victory, for Porfiro Díaz, with clerical sup- rt, spearheaded a successful coup in 1876. Without making any ndamental changes in the laws, he permitted the Church to regain rt of its lost freedom. For example, it was allowed to own buildings d acquire real property for the upkeep of these buildings as well reestablish schools and colleges in a number of states. The Church joyed such prosperity that five new Archbishoprics were created ring the Díaz regime. This tacit consent of revitalized Church in- ence acted as a catalyst to the latent liberal's discontent and it was potent cause of the Revolt in 1910.

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Revolution

The Revolution of 1910 promised agrarian and educational reform which alarmed the Churchmen because it would affect their recently reacquired landholdings and educational facilities. A Catholic party supported by prelate patronage unsuccessfully opposed the Revolutionary activities. The Church alienated itself from the Mexican politicians by this meddling in affairs of state and by identifying with large landholders and foreigners, especially the Knights of Columbus in the United States, who urged the American Government to intervene on behalf of the Mexican Church. Conflicts between Catholics and the government were accompanied by killing, looting, and widespread lawlessness. The Constitution of 1917 contained stringent restrictions that went far beyond those of its 1857 predecessor. In an attempt to drive the Church out of politics, destroy its social influence and confine it to strictly religious activities, the Constitution gave state legislatures the power to determine the number of clergy needed in each locality. It also excluded foreign priests and placed further limitations on the political and property rights of clergymen. If these and other measures had been strictly enforced, the very existence of the Church would have been threatened.

However, the anti-Church clauses were not activated until 1926 under the administration of Calles. He was unrelentingly anti-Catholic, and stinging criticism of the government and Constitution by an Archbishop, coupled with public displays of disobedience on the part of Catholic organizations, incensed Calles to the point of unleashing all the anti-clerical laws that his predecessors, for political reasons, had ignored. Convents were raided and hundreds of foreign priests were deported. Congress ratified his *Ley Calles* which declared that no priest could teach primary school, no priest could wear religious garb in public, and no priest could speak out against the Government or Constitution. The state could close any church on short notice if it failed to comply with the laws.

The Church decided that it could not comply to Calles' Laws, which they found repugnant and intolerable. In a drastic and unprecedented move, on July 31, 1926, the Mexican Church suspended all religious exercises. In the predominately Catholic country, the ecclesiastical strike was a powerful weapon. Organized lay Catholic resistance first took the form of a boycott. When neither closing the churches nor the boycott deterred the government from its course, lay organizations, individuals, and even priests began resorting to armed violence. Calling themselves *Cristeros*, they put together small guerrilla armies which attacked army garrisons, dynamited trains, and burned buildings. The government deported many prelates on the charge of inciting revolts and returned the insurrectionists' violence with its own. A bitter religious-civil war raged for 3 years. In 1929 several conferences beween the Mexican President and Church representatives, with United States Ambassador Morrow acting as intermediary, brought a gradual onciliation and churches reopened in June 1929.

The *modus vivendi* did not bring hostilities to an end. Throughout he early 1930's the hierarchy and conservative Catholic action groups ontinued to press for what they felt were the legitimate rights of the Church. Liberal politicians were piqued by what they felt was flagrant disregard of Constitutional laws by the religious groups' activities. Since the late 1930's both sides have moderated their positions and relaive harmony in Mexico's Church-state relations was achieved through amelioration of the major friction-producing issues. These issues include clerics in politics, Church ownership of private property, the number and nationality of priests, and parochial education.

The Constitution explicitly forbids clerical interference in politics. However, as the revolutionary government grew in strength and confidence and as Mexican-born priests ascended into the Catholic hierarchy (replacing the deported foreign-born priests who were generally more given to clericism), a flicker of empathy began to develop between the two. Though no Catholic political parties as such were allowed in Mexico, various Church-oriented political groups were tolerated in mid-1968. Partido Nacionalista de México (PNM) and Unión Nacional Sinarquista were openly pro-Catholic. Priests advised parishioners to support political candidates favoring Church interests and rights. Many clerics have been particularly outspoken against what they believe to be grave Communist dangers in Mexico. In 1962, 10,000 persons gathered outside the Basilica de Guadalupe in Mexico City as part of a prayer sessions in support of the United States position in the Cuban crisis. Priests have gone so far as to threaten peasants with excommunication for joining Communist groups. Liberal spokesmen are quick to point out such instances of political meddling but the Church hierarchy usually avoids identifying with the pro-Catholic factions and individuals, thus avoiding state reprisals.

The Constitution declares all churches, rectories, and convents to be government property, gives individual states the power to control the number of clergymen permitted within their boundaries and prohibits foreign-born priests. The government's permission is required before a new church structure may be built. In most states the clergy have no problem securing building permits though some states still occasionally deny petitions. Once constructed, a church becomes national property. Church officials have said that a constitutional amendment allowing them to own new church buildings used exclusively for worship purposes should be enacted. Clergymen also maintain that the mandate allowing states to determine the number of priests contradicts the Constitutional guarantee of religious liberty. Without changing the laws the revolutionary government has decreased the tension these issues produce by overlooking some violations of the religion-suppressing statutes. The noticeable number of foreign-born Jesuits active in several parts of the country is an example of the *de facto* allowances tacitly granted to the Church by the government.

Article 3 of the Constitution, which aimed at removing all vestiges of religious education in the schools, was amended in 1945. It still prohibited religious elementary, secondary, and normal education, but not theological seminaries or universities. Also, private institutions were allowed to exist as long as they received permission from the government and oriented their instruction toward the state educational ideals of developing a love for the country, an awareness of internationalism, independence and justice, fighting against ignorance, prejudice and fanaticism, and remaining completely free of all religious doctrine (see ch. 9, Education). Church schools began to operate under ostensibly private auspices though they were named after patriots instead of saints.

In 1962, 30,000 church schools prospered as "private" institutions. Notwithstanding the church schools' new freedom, control over the schools by the government was growing, not subsiding. The public schools were also flourishing and an increasing percentage of the nation's teachers were from schools under government control. In the church schools religious instruction was not extensive due to the heavy schedule imposed by government regulation. Also, required state textbooks precluded church schools from over-emphasizing religion.

The obligatory textbooks caused an altercation showing that Church-state relations, though much improved, were far from perfect. In 1960 the Government provided free and compulsory textbooks for all elementary schools both public and private. Some Catholic priests, parents, and businessmen criticized the books as leftist and anticlerical and staged numerous protests against them. The books continued to be distributed and Church complaints have decreased somewhat with the government allowing more tolerance in their selection.

Despite growing rapport between Church and government, numerous religion-suppressing statutes remain clamped on the Church and many persons feel these laws are unjust, outmoded, unpopular, and oppressive.

THE CONTEMPORARY SCENE

Religions of Mexico

Catholicism is the predominant religion in Mexico with over 36 million followers in 1967. The number of Catholics in the total population has decreased slightly in the last 30 years from about 97.8 percent in 1930 to 95.5 percent in 1960, though Mexican church member-p statistics vary considerably and percentage estimates for 1960 ige from about 87 to 97 percent of the total population.

Mexican Catholicism has social and regional variations in ritual and rament observance. Upper classes adhere to formal Catholic doc-ıes and look with disdain on lower class pious practices which are en a fusion of Christian and pagan elements, held over tenaciously ım pre-Conquest Aztec and Maya religions. Generally, Christian tures prevail in the northern states and in major urban areas, while lian beliefs and practices are prevalent in the Yucatán Peninsula l in peripheral population regions.

It is interesting to note that the strongest Catholic areas today are ıerally those in which the main thrust of 16th-century missionary ivity occurred while the weaker Catholic regions correspond to the ıas of least intensive missionary work. Many of the anti-clerical per-ınel of the Mexican Revolution came from the weaker regions while ı opposition was usually strongest elsewhere.

Protestants comprised about 1.9 percent of the population in 1960, ıugh estimates varied from 1.6 to 3.1 percent. In the mid-1960's otestants claimed approximately 1.3 million members with a slow t steady yearly rise evident. Presbyterians, Methodists, Baptists, l Pentecostals are the most active denominations in Mexico; other ıups include Lutherans, Episcopals, the World Gospel Mission, l Wycliffe Bible translators. Protestant faiths have made their ap-ıl to mostly the lower classes in both rural and urban areas and ve had little effect on the upper classes in the professional and stocratic segments of society.

Mexico's Jewish population accounted for about 0.3 percent of the 60 population, or 109,750 persons, 90 percent of whom lived in the ıital. About 55 percent of the Jews were Yiddish-speaking Ashkena-ı; 15 percent were Spanish-speaking Sephardim, and 10 percent re Arabic-speaking Jews. The Jewish people are mainly middle-ss businessmen engaged in trade and commerce. There are also a mber of Jewish Indians who speak Hebrew and attend synagogues. ey are dispersed in the lower classes throughout the states of Puebla, exico, Veracruz, and the Federal District.

Numerous other sects make up approximately 0.3 percent of the pulation, including several thousand Mennonites, who are mainly rmers in north-central Mexico, spiritualists, freemasons, Mormons, ıakers, Orientalists, agnostics, and atheists. In 1960, over 192,000 rsons claimed no religious affiliation.

Organization and Operation

Catholic Mexico is ecclesiastically divided into 11 archdioceses, 47 ıceses, and 2,520 parishes under the jurisdiction of a centralized rarchy that in 1968 included 1 cardinal, 14 archbishops, and 56 bishops. Prelates are appointed by their superiors and all policies are set down by officials in high positions who are traditionally members of the upper social classes. The hierarchy's activities are overseen by the Mexican government, which does not legally recognize the Church nor does it maintain diplomatic relations with the Vatican.

Priests, following archbishops and bishops in the hierarchial order, numbered 7,616 in 1967. Priests are the highest spiritual authorities in a parish. They perform various religious rites, give advice and guidance in spiritual as well as economic, social, and political affairs of the parish, are often village counselors, and in isolated areas even provide medical aid for their parishioners. Priests supervise the various lay functionaries of the Church, such as sacristans and cantors. Sacristans act as caretakers of church buildings and as personal aids to the priests. Cantors, or church singers, are in charge of church musical tasks which involve singing during Masses and leading hymns.

In 1967 there were 40 religious orders of men and 93 religious orders of women whose numbers were 3,000 and 20,016, respectively. Some of the orders are committed to only sacred functions but many are active in Church educational institutions, hospitals, orphanages, charitable programs, and missionary work. The Mexican Church operates its own National Foreign Mission Society and today is sending missionaries to the Orient.

International, national, regional, and local lay Catholic organizations abound in Mexico. Catholic Action movements promote Church-oriented social welfare programs. Rural and urban youth groups participate in housing, sanitation, recreation, and community improvement programs. Thousands of lay teachers and missionaries are working to raise literacy figures and standards of living in lower class city slum areas and in isolated rural regions. Private groups of the faithful from trade unions, housing settlements, towns, and villages make regular pilgrimages to the Shrine of the Virgin of Guadelupe in Mexico City. The Movimiento Familiar Christiano (Christian Family Movement) works to improve family stability and conjugal harmony through spiritual exercises and week-end reareats. Numerous lay associations function on a local level in villages and towns, organizing fiestas, and promoting religious activities.

Though the Mexican Catholic Church is regarded as one of the strongest in Latin America, numerous probiems hinder its organization and operation. These problems include insufficient numbers of clergymen, inadequate financial resources, widespread religious indifference, every-increasing secularization, and clerical conflicts of ideology.

In 1960 the priest-to-parishioner ratio was about 1:6,000 indicating a serious shortage of religious personnel. This paucity of priests reduces the influence of Catholicism in both rural and urban areas.

The problem is caused partly by the government's ban on foreign priests and partly by the unattractiveness of priestly vocations in erms of the meager monetary returns and other temporal sacrifices a eligious life entails. Since the masses of Mexico's population are relatively impoverished, the majority of parishes are poor also and the Church, deprived of its landholdings under Constitutional law, must contend with numerous pecuniary problems.

The consequences of these problems are that many isolated villages do not see a priest more than once every 5 years. In peripheral parishes most Catholics receive baptism, but Masses and religious teaching are rare because the priests find it impossible to attend the spiritual needs of all the villages in their territory. In urban areas, recent mass migrations to cities have caused considerable overcrowding of parish precincts. Unable to carry out their religious functions effectively in these crowded situations, priests often are discouraged while religious ignorance, indifference, and secularization are encouraged. Mexican church eaders are acutely aware of these problems but difference in outlook among the hierarchy occasionally precipitate further problems instead of solutions.

The Church has been conservative throughout Mexican history. While attempting to conserve and preserve the status quo, the Church consistently condemned changes in society because change was thought of as inimical to the existing faith. In contemporary Mexican society rapid social change became an inexorable and often unsettling fact, and the Church, whose traditions tended to restrain the increasing demands for change, was often associated with static backwardness.

The Church has slowly been transforming this traditional image of conservatism by identifying itself with more liberal policies. Yet, a ift in the hierarchy exists between progressive and conservative elements, usually with priests in the former category and bishops in the atter. In 1967 Mexican bishops issued a statement decrying Church critics (which included many priests) and what they termed irresponsible efforts at reform that tended to degrade the Church and cause confusion among the faithful.

These and other problems were being courageously faced by eclesiastic officials. The Church belonged to the Latin American Bishops Council (CELAM) which promoted cooperation of hierarchies in solving common problems. Under the auspices of the Church, thousands of its members actively engaged in social reform and betterment programs as exemplified by its many enthusiastic lay organizations. Priests worked to ameliorate social problems and improve the Church's organization and effectiveness. Thus, as Government hostilities continued to subside and as clerical leaders worked to better the Church's image and influence, Catholicism in Mexico looked forward to a future filled with both challenges and promise.

The Protestant Church was firmly established in Mexico. In 1961 ordained ministers and laymen numbered 2,521 with foreign personnel contributing an additional 431 persons. Most of the more than 30 denominations and missionary groups were sponsored by their affiliates in other countries. Mexico's first Protestant seminary began operating in 1917, supported by Methodists, Disciples of Christ, and the Congregational Church.

In the 1960's Presbyterians led Protestant activity in Mexico with establishments in 22 states organized into 9 presbyteries (equivalent to Catholic dioceses). It also operated a large publishing house in Mexico City, four secondary schools, eight training schools for ministers, and a number of hospitals and other institutions. The Baptist, Episcopal, and other denominations supported seminaries in the country and a large number of Bible schools were operative, mainly by pentecostal groups. Pentecostals and allied sects helped distribute many of the 626,000 plus Bibles that were in Mexico in 1961.

One of the most ambitious Protestant projects was the Summer School of Linguistics located at the Wycliffe Bible Translators Institute in Mexico City. A staff of over 250 specialists created and distributed dictionaries, grammars, and Bible translations and promoted the scholarly study of Hispanic cultures.

The number of Protestant missionaries in Mexico increased as areas in the Far East became closed to missionary work. Protestant groups have made substantial contributions to Mexico's literacy, education, and living improvement programs. Lay groups were active, with special emphasis placed on youth. A National Student Christian Movement and other student Christian organizations like the YMCA fostered Christian ideals and carried on social welfare projects. The Evangelical Audio-Visual Center of Mexico (CAVE) was an interdenominationally sponsored library of films and other materials for use by the churches.

Problems confronting the Protestant denominations include confusion in the minds of the people caused by the variety of Protestant groups and their differences in Gospel interpretation, vestigal Catholic resistance to their activities, and pandemic secularization. A number of inter-denominational organizations, such as the Committee on Cooperation in Latin America (CCLA), espoused coefficiency among the Protestant bodies and discussed common problems. Notwithstanding the above problems, Protestantism was prospering in Mexico.

Jewish organizations and institutions played a small but active role in Mexico's religious life. The Comité Central Israelita de México officially represents the Jewish community in relations with the Government. Seven schools maintained an enrollment of about 4,700 children in 1962. Several Yiddish newspapers were published and there was a Zionist-sponsored Institute for Cultural Exchange. Some antisemitism, especially in the form of anti-Jewish literature, existed though the Government suppressed such activity whenever possible. Freemasonry, first introduced in the 18th century, had lodges throughout Mexico and its influence was widespread. Members were mostly upper- and middle-class politicians, educators, business, and professional men. A Catholic may juxtapose faith and freemasonry, but the Church opposes such liaisons.

Other sects and informal religious organizations openly and clandestinely operated in Mexico especially in urban areas. Mexico City had about 75 Spiritist and Spiritualist "temples," which are often private houses. These cults were officially denounced by the Church, but many Mexicans claimed the *espiritualistas* were Catholic, and spiritist curing has been widely accepted by the lower classes without causing any changes in religious affiliation.

RELIGIOUS PRACTICES AND BELIEFS

Principal Catholic rites of baptism, confirmation, communion, confession, sacrament of the sick, marriages, Masses, extreme unction, and other religious ceremonies including holy processions, devotions, pilgrimages, and fiestas are celebrated throughout Mexico, though innumerable regional variations in ritual exist due to the intermingling of Christian and indigenous elements of worship.

Generally, religious practices and beliefs are strongly imbued with paganism in the remote Indian villages and in other isolated areas, a fusion of Catholic and pagan elements prevails in most rural *mestizo* communities and in lower-middle class densely populated areas, while formal Catholic ritual devoid of indigenous influence is practiced by Mexico's urban upper classes.

Certain symbols and observances are meaningful in all three of the environments—isolated, rural, and urban—including the image of the Virgin of Guadalupe, patron saints, fiestas, churches, domestic shrines, and crosses.

The Virgin of Guadalupe is the most widely recognized and universally worshipped of all Mexican saints. During the early days of the Conquest she appeared in a vision to a poor Indian named Juan Diego. The dark-skinned virgin asked him to build a church in her honor so that she could be near his (the Indian) people to protect and love them. The apparition appeared directly over a destroyed Indian shrine to Tonantzin, the indigenous equivalent of the Virgin Mary. The new virgin enabled the Aztecs to indianize the white man's religion and make it their own. This miracle was officially endorsed by the Catholic Church and the Virgin of Guadalupe became the patron saint of all Mexico. The Virgin's shrine is the holiest in Mexico and daily large crowds congregate in the plaza near the Basilica. Upon entering they kneel and crawl forward to a spot where they can gaze at the image and pray.

Even more important than Our Lady of Guadalupe to average Catholics are the local patron saints or *santos*. They are protectors of the villages and their images are displayed prominently in every church. The villagers look to the *santo* to save crops, stop epidemics, still earthquakes, bring children to barren women, and solve countless problems. They have personal qualities, and their images are worshipped directly as divine beings rather than just symbols of living saints. Some local *santos* have extraordinary miraculous qualities and gain prominence over a wide region. These regionally important *santos* become the object of pilgrimages and special veneration. Parishioners show gratitude for their protection and special favors by the *santo* by holding annual fiestas in homage to them.

Fiestas are organized through institutions known, in many localities, as *mayordomías*. Each year a leader, called a *mayordomo*, is designated to take charge of the planning, arranging, and financing of the event. He is often referred to as the burden-bearer of the *santo* during his year in office, and he is expected to pay for a major portion of the fiesta expenses. Though it may involve the equivalent of several years wages, the loss of money is offset by the gain in prestige which holding the office brings. The *mayordomo* distributes the burden among other community members and *compadres*, appointing committees to help provide music, fireworks, and food.

Fiestas usually open with morning Masses and *alabanzas* (sacred songs) followed by elaborate folk dances, commonly with Biblical themes, often considered the most important part of the fiesta. Dances and other parts of fiestas have special names and qualities according to their area of origin. For example, the *huapango* of Veracruz, *jarabe tapatío* of Jalisco and *jarana* of Yucatán are all fiesta folk dances, though each has a distinctive regional expression. Processions in which everyone can participate, a surplus of food and intoxicating beverages, bands, bullfights, incense, colorful costumes, and crowds contribute to the festivities and at night brilliant fireworks displays light up the sky. Fiestas give the people an opportunity to show their faith and pride in the local supernatural beings, as well as providing a needed shift from their mundane way of life.

Churches are a ubiquitous feature of Mexican cultural landscapes. They usually tower above other village and town structures and in them are found the highest artistic contributions of the community. Elaborate and sumptuous altar decorations, vivid drawings, and carvings, and the rich interior colors contribute to the awe-inspiring atmosphere and appeal to the Mexican's aesthetic sensitivity. Churches are a focal point of community activity. They are also refuges from the outside world and upon entering churches the people feel themves to be in another little universe, free from temporal tribulations d cares.

Domestic shrines are found in many Mexican homes. They usually nsist of a picture or small effigy of a favorite saint to whom the mily turns in time of need or when it is impossible to attend church d pray to the *santo* there. The small shrines often occupy one corner a room. Near the *santo* may be found candles, incense, a vase of wers, and a cross.

Crosses are among the most widespread of Mexican religious sym- ls. Besides being conspicuously displayed in churches, domestic rines, and cemeteries, they are frequently found along crossroads d trails throughout the countryside, so that persons traveling from e town to another may stop to pray. Crosses are generally thought as powerful protective symbols, though their significance, as with her sacred symbols and observances, often varies from isolated to ral to urban religious environment.

The isolated religious environment in most cases corresponds with e areas of largest Indian populations (since for centuries indigenous oups retreated to inaccessible areas in the face of foreign intrusions at threatened their cultures and sometimes their lives). The Indians ake no distinction between religion and culture or between Catholi- sm, and paganism, and they are not aware that such differences ist. Indigenous worship is full of modified Catholic ritual, but ough they accepted certain rites, they rejected Christian monotheism cause it is too abstract for them to understand and because it con- cts with their view of after life. The Indians view the universe as habited by innumerable supernatural beings and many of the fea- res around them are spiritual and personal, such as the wind, rain, ountains, sun, and moon. When "Christianized" these polytheistic ople have replaced the old gods with the new saints but their func- on remains the same.

The Indians are extremely religious. The Virgin of Guadalupe and her sacred symbols are deeply venerated, and crosses protect the ithful from fright, thieves, and all undesirable phenomena. They mmunally observe hundreds of holy occasions each year and con- ntly engage in spiritual activities from baptism to extreme unction. e neglect of ritual obligations subjects the individual or the whole mmunity to punishment in the form of sickness, crop failure, or her misfortune.

The rural religious environment includes the thousands of lower- ddle-class *mestizo* villages spread throughout the Mexican country- le. Religion in the rural areas is also a blend of Catholic and pagan ments with the former now predominating. As in the more isolated gions, the concept of God is unclear and his significance lies largely his vague preeminence. No concrete concept of heaven or hell or of eternal punishment is found though belief in *el pingo* (the devil) is common, and many evils are attributed to him. The supernatural world, as the regular world, is thought to be filled with hostile forces and punishing figures which must be appeased to secure good will and protection. Religious practices and beliefs begin to be differentiated from temporal affairs. Sacred activities are practiced on a personal-family level instead of on the group level of the Indians. Magic and sorcery are thought of as very sinful; nevertheless, many villagers seek the services of *curanderos* (healers who incorporate elements of magic in their treatments) for cures and advice.

The urban religious environment contains many sharp contrasts. Christian and pagan components become totally separated in the cities. Indigenous beliefs undergo a metaphysical metamorphosis and what was once religion becomes magic, then superstition, and finally folklore. With few exceptions, religion becomes a separate and specialized activity, secular attitudes characterize larger areas of behavior and concern with the supernatural becomes less constant and less urgent.

Ritualistic orthodoxy typifies the upper class in Mexico City and in other metropolitan centers. They frequently have close personal contact with the Church hierarchy, attend Mass regularly, and contribute money, time, and support to Church activities. Their religious behavior at home usually does not extend beyond simple acts of worship performed individually and privately. The middle classes have much less contact with religious activities, which are generally confined to baptism, weddings, funerals, and frequent Sunday services. In the lower classes combined Catholic-pagan practices persist, but pagan elements are held in disrepute by the upper classes, Church, and government, and they tend to disappear.

Magic and sorcery are common in the cities; however, they are not often connected with religion but are thought to be caused by the disorganization and breakdown of traditional society and consequent personal insecurity that often accompanies urbanization and secularization. Spiritists, magicians, and sorcerers are patronized mainly by the lower classes. When sickness befalls a poor *mestizo*, he would pray to his *santo* and seek a *curandero* while, in the same situation, a wealthy businessman would appeal to the Virgin and call a physician.

Despite secularizing trends, the religiosity of the Mexican people cannot be denied, the Church's influence is increasing, not diminishing, and an immense majority of the population professes the Catholic faith. A differentiation between professing and practicing Catholics must be made to understand the character of contemporary faith and belief in Mexico.

Practicing Catholics include a small segment of the upper class, some in the lowest classes (especially the Indians) and most Mexican females. Religiousness in women is admired and they are looked upon as the preservers of morality and good taste, and they have almost exclusive supervision of the moral and religious training of the young. These practicing Catholics are devout and ardently faithful; they attend mass and receive the sacraments regularly; and they fulfill all of the moral and ritual obligations set by their Church and priests.

On the other hand, nearly all Mexicans are professing or nominal Catholics. They know and care little about the Roman Catholic doctrines of the Trinity, Incarnation, Redemption, heaven or hell, and papal infallibility. They are inclined to ignore the Church except as it may affect their social standing. Even in the lower classes, where religion is emotional and pervasive, it involves little contact with formal Church affairs or beliefs. These feelings are mirrored by sacramental statistics. Although over 90 percent of the population receives baptism, the percentages for other sacraments are much lower. In some dioceses only 30 percent of the population receives confirmation and mass attendance figures as low as 5 to 25 percent are reported.

Religion is thought of as a matter of individual consciousness and the personal relationship between an individual and the supernatural is much more important than outward show of piety. For many Mexicans, Catholicism is simply a cultural trait and for others being a Catholic means acknowledging belief but not necessarily adhering to religious ideals or practices, though most nominal Catholics would be offended if their faith were questioned.

Religion is thought of as mainly for women, hence men from all social classes generally refrain from outward displays of religiousness because it would conflict with the values of masculinity (see ch. 12, Social Values). Leaving the Church is often an affirmation of manliness and expressing pro-religious sentiments jeopardizes masculine identity.

Considering that most loyal Catholics are women and members of the lowest classes (particularly Indians who tend to be servile and have deep respect for authority) and that religious values and masculinity conflict (causing most men to have little empathy and occassional hostility towards the Church), it is understandable why the large Catholic majority in Mexico has never risen to defend its religion during the long standing antagonisms between Church and state.

CHAPTER 12

SOCIAL VALUES

Social values in Mexico—like Mexican social structure, economy, and polity—are in the midst of transition from traditional, rural forms to modern, urban, industrial ones. A reorientation in world view is accompanying this change in social values. Behavior patterns are diverging from traditional ones, not only in the growing cities and towns but in the rural areas, as the effect is felt of the values of modern Western culture.

The traditional value systems which are being modified or supplanted are of three different kinds. The first is that which grew out of the persisting values of the high Meso-American Indian cultures of the Center and South characterized by a group-centered, fatalistic, closed communal pattern (see ch. 3, Historical Setting; ch. 5, Ethnic Groups and Languages). The second has evolved in the more Hispanicized and *mestizo* (mixed white and Indian) North; it is hierarchical and essentially feudal in character, although more receptive to new values than the first system. It glorifies individualism and *machismo* (manliness) in males, and piety, submission, and domesticity in females. The third is the even more traditional pattern of the old *criollo* (creole) elite, which has persisted in the upper, and conservative parts of the middle, classes, in spite of *mestizaje* (racial and cultural blending of whites and Indians) and the Revolution. This last value system has been, and to some extent still is, characteristic of the higher clergy and the surviving *hacendados* (estate owners), and is found principally in the larger towns and cities, especially the Capital.

The new value system is taking on many characteristics of middle-class-dominated Western society, while at the same time incorporating and modifying elements of both the individualistic/authoritarian Hispanic dualism and the communal, group-oriented Indian attitudes. Hence, more openness, less emphasis on the importance of origins—either of family or of place—more pragmatism, less fatalism or faith-centered conformity, and more sense of virtue in individual freedom to act are all coming into the value system, especially in the urban sector.

Individual values have differed significantly in the three traditional value systems. Particularly in the cities, they are now coming to resemble those in other parts of the Western cultural complex. Members of the growing middle class are becoming more confident of their ability to function successfully (and thus of the virtue of so doing) outside either a communal or hierarchical pattern, and they are coming to view social and economic forces in a general rather than a local and particularistic context. The traditional dichotomies of role and value—between male and female, between landed and non-landed, between young and old—persist, but these too are being modified. Status, again particularly in the cities, is becoming more and more based on achievement than on ascription through kinship or ceremonial role. The traditional status values have not disappeared, but like other elements of the value system, they are in flux.

The crux of social order in modern Mexico stems from the ongoing phenomena of *mestizaje* and the Revolution, and the search for a national identity—whether that identity has as its focus "Mexicanness," an identification with emerging national values, or Indianism, a revaluing of the preconquest Indian past. Because of its origins, social order in Mexico is characterized by dichotomies between communal responsibilities and individual achievement; public and private authority. There remain values of the three traditional social orders which at times conflict with modern values. As in other societies, in Mexico the differences between the idealized view of the society and actual practices are significant.

VALUE SYSTEMS

Values in Mexican society are in flux, affected by the aftermath of the Revolution and by increasing acceptance of the values of Western societies. The impulses toward secularization, urbanization, and social reform which characterized Revolutionary Mexico in the first half of the 20th century, although moderated, continue in the 1960's. From the dissidence of Revolution emerged a need for harmonizing conflicting interests to reconstruct a new national community; Mexican nationalism became a cohesive social force. From active participation in revolutionary struggles, Mexicans of previously marginal membership in the national community (such as Indians, labor, and women) gained new status. Western values have increasingly been introduced through tourism, world-wide mass media, and changes in the economy.

The Mexican national value system which emerges as an apotheosis of the values of the ongoing Revolution is an amalgam of remnants of three traditional value systems—Indian, northern *mestizo*, and *criollo* elite—and a modern one stemming from Mexico's increasing connections with the contemporary Western world. The amalgam is not without dichotomies. Socially centered (communal, folk) values are at variance with individualistic and entrepreneurial values. There is a contrast between localism (or regionalism) and nationalism, not only in political values but in social values (see ch. 17, Political Values and Attitudes). Locally and nationally there are variances in what is thought to be the proper role of the individual; in his relationships to others; in loyalties, authority, and responsibility; and in the shaping of the social order.

The value system that has evolved out of the high Meso-American Indian cultures—persisting through conquest, colonization, independence, and revolution—has never fully incorporated the strongly individualistic attitudes of Western man. The Indian community tends to be group oriented, with a value system based on the assumption that all good things in life—such as wealth, friendship, love, masculinity, and power—exist in limited and unexpandable quantities within the closed social system of the commune (in Aztec culture, the *calpulli*). Because desirable qualities are limited in quantity, an individual who gains more than his share deprives others. Thus, in order to maintain equilibrium within the society and to avoid criticism and envy, the individual must avoid attracting attention to any real or suspected betterment in his life.

Inhabitants of the closed community are concerned with social relationships and the manipulation of the social environment rather than with the manipulation of nature or of systems outside the village. The village inhabitant is preoccupied with interpersonal relationships within the formal structures of the family, the godparent, and coparent system.

The contemporary Indian community, in contrast to its *mestizo* neighbors, has an historically ingrained set of relationships to its lands, often to the point where land ownership by outsiders is impeded if not prevented. The Indian community has thus tended to look inward toward the *patria chica* (literally, little country), maintaining its culture particularly with regard to the role of women, special marriage customs, greater reliance on the *compadrazgo* (co-parent) system, an elaborate cult of the dead, and the communal method of farming practiced by ancient Indian civilizations.

Because of this and because of the great value placed on communal occupancy of the land, the "Southerners" in the Mexican Revolution—such as Emiliano Zapata and Lázaro Cárdenas—have been great supporters of the *ejido* land reform, returning lands to the communes, especially in Central and Southern Mexico. Group ownership, contributions to the group's well-being, and a strong sense of place are the keys in this value system. Even among the urban poor one speaks of *mi tierra* (my land), referring to the home village toward which the individual retains a sense of attachment.

The second and third traditional value systems derive from different, and regionally peculiar, variants of *mestizaje*. Through them the influence of Hispanic values on social custom and thought is widespread. It is only recently that Mexico has begun to emerge from economic dependence on the essentially feudal triumvirate of agriculture, ranch-

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ing, and mining imposed by Spain. The authority-focused urban plan still dominates the Mexican city. The traditions of *caballerismo* (gentlemanliness, one whose status derives from landholdings and who disdains manual work), of *empleomanía* (a strong urge to tie one's life to government occupations), and strong individualism often associated with egocentricity, all derive from Spanish values.

The impact of the Spanish system of values in Mexico has been differential and related to both geographic constraints and opportunities and to the character of indigenous societies (see ch. 2, Physical Environment; ch. 3, Historical Setting).

In the north, where the Chichimec Indian cultures proved mostly unassimilable, and thus where even the *mestizos* were imported from Central Mexico, Spanish values came to predominate and a set of values pertaining to individual rather than group ownership of the land have been and largely still are characteristic, specially in rural areas.

During the colonial period in the Central zone, the *mestizo's* mixed blood tended to bar him from achieving social status. To avoid the social deprivation of the urban areas, the *mestizo* migrated north to Durango, Coahuila, and Nuevo Leon, becoming a *vaquero* (cowboy), *ranchero* (rancher), miner, or tenant. In this current of *mestizaje* certain values came to be preeminent and still characterize many areas of the North: fidelity to a *patrón*, or chief; status acquired through ownership of land, especially a ranch rather than a farm; and acquisition of status through riches.

The third current of *mestizaje* was both more localized and more diffuse but was especially significant in the Central and Southern Zones and thus spatially coterminous with the Indian value system. This traditional set of Hispanic values during colonial days came both from the Capital and larger towns and from the *criollo* landed aristocracy, provincial clergy, and small middle class. Land ownership, hierarchical status—in government or in the Church—a role in such traditional occupations as law, medicine, or banking, all characterized valued male and family roles. This value system is a distinct element of contemporary Mexican society which has contributed to the current overall value system. It has been associated with white supremacist (*blanco*) notions, especially during the long rule of Porfirio Díaz (1877–80; 1884–1911).

The value system emerging in Mexico is combining values out of Mexico's past, evolving indigenous ones and borrowing some from the rest of contemporary Western culture. Mexican society has been increasingly colored by values of the rapidly growing middle class (see ch. 6, Social Structure). An important new element, the impact of which cannot yet be fully assessed, was the student disturbances of 1968. The values of the "new Left"—pacifism, anti-establishment senments, idealistic rationalism, universal human brotherhood, and the ke—have been introduced into the Mexican value system, as they ve been into other contemporary systems (see ch. 17, Political Values d Attitudes).

Mexican adoption of modern Western cultural values can be seen a variety of fields. There is an emphasis in the society on the acquition of goods (televisions, radios, automobiles) and timeliness—the *esta* (midday nap) is waning and the hearty midday meal is being placed by the quick lunch. Pulque, brandy, and rum are being relaced by beer, whiskey, gin, and vodka. The cinema is gaining in opularity relative to the bullfight; ready-made Western clothes are eplacing traditional garb. Foreign sports such as American or Euroean football (soccer), baseball, and golf are becoming increasingly opular. English has replaced French as the second language in hools and colleges. Westernization is particularly evident in the ties, but with extensions of transportation and communications, rural egions are also coming under Western influence.

THE INDIVIDUAL

In the basic contemporary value system, the family is the fundaental social and economic structure. The family establishes its aunomy through independence, self-reliance, and a strong sense of rivacy. Except in rural areas or in the upper-class minority, where alue systems are more traditional, relations of the family with the xtended family or with the community are restricted to times of nergency and are formal in nature. Within the family the roles lfilled by an individual reflect the values of the society.

The husband-father role is one of dominance. As head of his houseold, the ideal man works to feed, clothe, and shelter the family; lfill his community and—if he is a rural dweller—ceremonial obligaons; mind his own business; and not take advantage of others. In ural areas it is thought he should avoid excessive ambition, aggreson or improvement in his living standard so as not to be the subject f gossip or criticism. The ideal role has contradictory goals and thus roduces contradictory behavior. In conforming to the individualistic ole of providing for his family, he can justify avoiding group reponsibilities such as giving economic aid to others or cooperating in ublic endeavors. In rural or lower class Mexican society, a good man oes not have to contribute to the welfare of the community. His otives are suspect if he does intervene in community affairs.

Fulfilling a role complementary to that of her husband's, the ideal ife is submissive, faithful, devoted, and respectful of her husband's ominance. However, her role in transmitting social values to the hildren may challenge the dominance of her husband, who spends uch of his time away from the family residence (see ch. 7, Family).

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Adult roles, especially in the rural South and Center and among the urban poor, emphasize hard work, thrift, practicality, restraint, and the ability to conform. Deviance from these values was traditionally explained in terms of supernatural forces controlling the nonconformist. Because of their position of dominance, men are detached, individualistic and sensitive to status differences. Direct competition between individuals is rare because of the value of restraint. When competition does occur it is between groups and has a quality of impersonality. For the rural dweller, aspirations are placed within his reach so that his ideal role can be realized. Concern for the future is largely absent because subsistence is a day-to-day task.

Tensions in the adult male are often the result of discontinuity between childhood and adulthood. The male child is inculcated with values of submissiveness, passivity, and dependence. This early training is not conducive to the development of inner strength, independence, and dominance expected of an adult male in a patriarchal society.

Values stressing individual initiative in improving one's social and economic status, emanating from urban centers, are providing alternatives to traditional behavior. The middle-class urban dweller, under the spirit of optimism and progress that these alternatives have created, has an active sense of control over his own affairs. The ability to manipulate his environment, which is perceived to be orderly and predictable, has allowed the urbanite to make long-range plans for social and economic improvement. By contrast, the rural dweller does not assume a fundamental orderliness in the universe. His attitudes toward life express a degree of despondency and pessimism; upward mobility and long-range goals are not perceived as alternatives to day-by-day existence.

Because of increased communication and interaction between cities and rural areas, there has been a degree of diffusion of alternative values and ideal roles. However, in the rural areas the new alternatives have increased more rapidly than the freedom to choose them. In many cases rural dwellers do not have alternative economic means of gaining prestige, although they may have internalized urban expectations. Thus, with an increase in alternatives of behavior, the rural inhabitant's concept of environmental control may be further reduced, leading to social disorganization if his expectations are not fulfilled.

Contrasting reactions to innovation and the breakdown of reciprocal assistance show a basic difference in peasant and urbanite adaption to a rapidly changing world. A peasant will tend to believe that technological development is reducing his opportunities to work as the cost of living rises. In contrast to this view, an urban dweller welcomes technological development as a generator of new kinds of work. Urbanites recently immigrated from the country can no longer count on assistance from relatives, co-parents, or friends left behind. The urban individualist is not concerned with this breakdown in reciprocal assistance; he does not merge his career with that of his relatives nor does he rely on traditional community ceremonies as a means of maintaining prestige.

The values held of women in the evolving society are less changed than those concerning men. Except in the most urbanized circumstances and among higher income families—especially the newly rich—the subordinate role of women in both the Indian and Spanish root cultures has tended to persist. A woman is expected to be docile, domestic, fecund, and pious.

The traditional values of docility and piety among children, and the extreme dualism of behavior for male adolescents in the family and among their peers is breaking down to some degree, especially in the urban middle class and in urban industrial laboring families.

INTERPERSONAL RELATIONS

In rural Mexico or among recent urban migrants, relationships outside the family are not highly valued. By keeping personal affairs to himself and maintaining distance in social relations, an individual may avoid criticism and envy from others. Thus, reserve and carefully guarded behavior characterize most social relationships, and informal behavior is restricted to the most intimate relationships. Even within the family, demonstrations of affection or bodily contact are avoided between the father and his children.

In the more traditional rural regions, sex, age, and kinship determine interpersonal relations. Because male superiority is assumed, women must show respect to men, wives to husbands, and sisters to brothers. Age and kinship affect personal interactions only after the sexual dichotomy has been perceived. Respect is to be paid by the young toward the old, and a formal, respectful friendship characterizes the relationship between children and their godparents or coparents. A godchild acknowledges the high status of his godparent by addressing him formally. Both godchild and godparent avoid intimacy or familiarity. The godparent has certain authority over the child and may not be insulted or criticized while exercising his authority.

Other relationships characterized by formal respect exist between inferiors and their superiors, whether superior by virtue of social and economic position, advanced age, high educational achievement, or political power. In these relationships, good will and indirect affection are expressed by fulfilling the required reciprocal behavior.

In the cities there is an increasing tendency to rely on informal dyadic ties rather than traditional or ritually created relationships. Because interaction is not formally sanctioned, these relationships can be terminated at any time. Thus, two individuals can examine the attractiveness of a friendship without committing themselves to a continuous co-parent relationship. Among the urban elite reciprocities are somewhat delayed and impersonal, reflecting the cosmopolitan, educated, and prosperous character of the upper class.

Mistrust, suspicion, and fear are common reactions to strangers, especially in rural areas or among the urban poor. Because the rural world view does not assume a fundamental orderliness to the universe, law and predictability are not assumed to govern the social environment, and immutable standards of behavior are not to be found. Behavior toward others is based on a pragmatic approach: whatever action presents the most simple, pleasing, and workable solution to a particular problem is the one taken. The individual does not expect just or impartial treatment from strangers.

STATUS AND PRESTIGE

In the traditional rural regions, sex, age, and kinship determine not only interpersonal relationships but status as well. Men assume all important economic, political, social, and religious leadership roles. Respect of the young toward their elders and toward members of their families reflects the higher status of these individuals. Wealth and standard of living are less important indicators of social status, because the majority of rural inhabitants live at the subsistence level and feel united by the equality of poverty. Those who are more successful tend to conceal their wealth in order to avoid envy, claims of friends, taxes, and pressures for contributions to the Church. The fear of displaying wealth reflects the belief that limited wealth exists and that to take more than one's share would be to deprive someone else. Thus, traditionally, the only way an individual may acquire prestige through wealth is by spending large sums of money at community celebrations. The maintenance of prestige means respectability, status, and authority for the individual within his community, as well as the privilege of giving his children the family status.

While many rural dwellers stress the equality of poverty, urbanites emphasize the equality of opportunity in the city. Urbanites tend to feel that upward mobility is desirable and is directly related to the ability to work hard. The middle class especially emphasizes hard work, temperance, frugality, and education. They see a basic hierarchy of jobs which parallels the level of educational attainment. These families strive to improve their status through conspicuous ownership. The urban poor are also acquiring the symbols of higher economic status. The widespread system of retail credit permits them to participate in emulative buying of goods, although many of the poor are in constant debt. Education is not as significant to upward mobility for the urban poor, for they do not see a direct correspondence between educational attainment and job status. For them, primary education always results in manual work, whereas secondary education does not guarantee white collar work.

Modern forms of prestige which are diametrically opposed to the traditional ceremonial forms are spreading from urban to rural areas. In some rural areas, families desiring higher status compete in ostentatious display of material symbols of wealth. This new orientation toward status has its roots in the *braceros* (Mexican farm laborers engaging in seasonal wage-labor in the United States). Traditional values did not disapprove of the *braceros'* accumulation of wealth, because it was brought from the outside and therefore did not deprive others of the limited wealth within the community. In many areas, traditional means of gaining status exist side by side with more modern, economically oriented means, with the result that in some cases rural people can no longer be confident of the behavior which will give the respectability they desire.

LOYALTY AND COMMITMENT: AUTHORITY AND RESPONSIBILITY

Traditional bases of authority and loyalty persist among less acculturated Indian groups, particularly in Central and Southern Mexico. Within the family the father maintains an authoritarian role and familial loyalties are strong. Within the community, the village *caciques* (chiefs) and elders persist as authority figures. In many villages, the local Catholic priest has assumed the authoritarian and ceremonious role of the priest of the old indigenous religion.

In Northern Mexico, loyalties have been more feudal in character. The *vaqueros* (cowboys), *peones* (peons), and small farmers, more Europeanized since colonial days, have in the past directed their loyalties to a leader, whether an *hacendado* (estate owner) or the chief of a band. Today, *hacendados* as the focus of authority survive only in remote cattle-ranching areas of Chihuahua and Sonora. Where bandits and nomadic Indian bands exist, the band chief still commands a highly authoritarian role.

In the Northeast, especially in the industrial zone focused around Monterrey and in the oil areas inland from Tampico, male loyalties have seen a shift: loyalty to economic entities, especially labor unions, is becoming marked. Women, on the other hand, retain their traditional loyalties to husband, family, and Church.

Government as a focus of authority is met with varying degrees of acceptance and loyalty. Among rural dwellers and the urban poor, local government is seen as an extension of external powers, not as a self-governing device designed to meet governmental and financial needs of a community through local responsibility. This concept of government is reinforced through taxes collected in local areas for regional development rather than for the direct benefit of the local community. Rural inhabitants do not identify national problems of defense or internal order with their own interests. They tend to feel indifference on the part of regional government towards them, an indifference stemming from their poverty and low status. Urban inhabitants are less concerned with governmental indifference and place their confidence in personal relations with their leaders (see ch. 17, Political Values and Attitudes).

Where governmental action directly affects a community, interest is generated. Local officials who act as intermediaries between the state government and the local population may be granted special status. These officials may be admired for their ability to speak well and for their actions on behalf of the community, but they will be criticized if they neglect responsibility for their own family. Often an individual will not seek office because of concern that others will suspect his motives.

Although duties of the major officials are determined by state law, the way in which they administer their duties and in which they command authority depends on their personalities. A timid local leader will serve only as a figurehead and command little authority. The local group perceives leaders more in terms of personality than political affiliation.

Decision-making on the local level may be chiefly the responsibility of the officials, because of an apathetic electorate, or it may depend on a carefully achieved consensus. Especially in the more Indian communities, open opposition to a political suggestion is undesirable because it may upset the equilibrium of the community. In cases where decisions must be based on community agreement, the leader of a meeting announces a course of action only when he is confident that there will be no dissent. Generally, a diplomatically formalized discussion of views is held so that the leader can determine the most popular viewpoint.

Perhaps the most pervasive change in authority patterns has been the growth of power for local, regional, and national leaders within the apparatus of the Institutional Revolutionary Party (Partido Revolucionario Institucional—PRI) (see ch. 13, The Governmental System). Associated with this growth has been the rise of *caciquismo*, a power structure focusing on provincial party chiefs, frequently former presidents of the republic. These leaders carry such implicit responsibilities toward their followers as preferment, patronage, and welfare.

THE CHANGING SOCIAL ORDER

In the cities and in Northern Mexico, where the social order is characterized by a larger middle class, the Spanish and Western value of competitive individualism justifies a social stratification pattern in which hard work, education, and material acquisition determine upward mobility. In rural areas and among recent migrants to the cities, the fact of poverty seems to the poor to justify the assumption of limited quantities of desirable qualities in the social order. Rural villagers have been accustomed to a closed system with virtually no social mobility.

Middle-class urban values are finding acceptance among the lower urban and rural classes, but because of their economic status, these classes feel unable to participate in the new social order characterized by mobility. Because they continue to live at a subsistence level, they cannot gain prestige through material acquisition. Traditional explanations are provided for their low position in the social order: one's environment and future cannot be controlled or predicted; only luck can determine success.

Thus, in much of urban and rural Mexico traditional and modern value systems coexist. For the rural poor and the recent urban migrant, acceptance of the modern value system does not imply participation in all facets of the modern social order.

Efforts at reform and change, at creating a cohesive society in which as many interests as possible are represented, are embodied institutionally in the ruling coalition party, the PRI. Agricultural and especially Indian rural interests are represented in the National Agricultral Workers Confederation (Confederación Nacional Campesina—CNC), membership in which is obligatory for every worker of communal lands. Other groups whose interests are officially represented within the PRI include public servants, teachers, and industrial workers. There exist also strong autonomous unions in transport, petroleum, mining, and metallurgy (see ch. 21, Labor). For the military, now excluded from the PRI as a special interest group, and for all others seeking a formal affiliation with the PRI, there is the National Confederation of Popular Organizations (Confederación Nacional de Organizaciones Populares—CNOP), created to provide an avenue for individual identification with the emergent Mexican society.

Outside the official party, interest groups have been created among bank employees, small independent farmers, cooperative labor groups, chambers of commerce, and chambers of industry. These groups are consulted frequently by the President of the Republic on questions of particularly great national or sectoral importance.

Prior to 1940, the principal concerns of the revolutionary Mexican society centered on: institutional change; agrarian reform; urban labor movements in industry and public utilities; mass public education; elimination of foreign economic imperialism; and intellectual dominance. With many of the Revolutionary goals accomplished—or at least with programs underway to accomplish them—since the 1940's materialist goals have replaced Revolutionary ones, except among embryonic revolutionaries of the "new Left." The old upper class, based on genealogy, land, and race is giving way to a new plutocracy, bourgeois in origins, deriving its wealth—and hence its power—from industry, commerce, and finance. The mainstay of the ongoing Revolution, both politically and socially, is the emerging middle class. This class is active in promulgating social values drawn from contemporary Western culture at the same time that it champions a national Mexican culture.

SECTION II. POLITICAL

CHAPTER 13

THE GOVERNMENTAL SYSTEM

The governmental system is known throughout Latin America for its relative stability since the great Revolution of 1910–1917. One of the keys to this stability lies in the capacity of the governing apparatus to compromise conflicting demands without resorting to force. Another may be found in the more authoritarian aspects of the system whose nonetheless benevolent purposes help to accommodate many of the apparent lacks of formally democratic practices and direct popular accountability.

Political power and authority are organized hierarchically and derived from easily identifiable sources. The President of Mexico is the center of political power and authority. He is chosen from the elite of the Institutional Revolutionary Party (Partido Revolucionario Institucional—PRI) and elected by direct popular vote. The PRI consists of a number of sectors and affiliated labor, professional, and service organizations. From the directorates of these affiliated organizations comes Mexico's power elite which in turn designate the PRI candidate through a delicate and informal process reflecting the influence of the major factions and their leaders and operating as a system of checks and balances to maintain the integrity of the coalition. Out of this process has come every Mexican President since the 1920's.

The persons who control all major aspects of administrative decision-making and public-policy formation throughout Mexico at all levels of government are generally within the system composed of the PRI and its cooperators. Thus programs, offices, and the personnel to run them are usually sanctioned by the official party and its allies.

Most governmental appointments, hence most public policy, occurs as a result of a filtering process that has its genesis in the three principal organs of the PRI. The highest ranking of these is the National Assembly, whose traditionally most important role has been the naming of the PRI's presidential candidate every 6 years. The second of the major organs is a smaller group known as the National Council, which is intended to represent both the National Assembly, when it is not in session, and the state party organizations. In addition, the sectoral organizations of the PRI are given representation on the National Council.

The selection of representatives of the sectoral organizations is done by the third, and practically speaking the most powerful, structural entity of the PRI, its National Executive Committee (Comité Ejecutivo Nacional—CEN). The CEN calls the National Council to meetings and exercises a "watchdog" function over the party on behalf of the National Assembly and the President of the Republic. The president of the CEN is designated by the President of the Republic and may be similarly removed. The CEN maintains party discipline and is the active channel whereby sectoral, state, and popular desires are articulated upward, through the presidency, into the congress, and later promulgated in Mexican law and administrative determinations.

The Constitutions of 1824, 1857, and 1917 have all specified a federal system, with division of powers modeled after the United States Constitution. The Executive branch is, however, much the most powerful, resulting in a weaker form of federalism. The President serves for 6 years and cannot be reelected. He is commander of the armed forces and can appoint or remove his chief administrative officers as well as the mayor of the Federal District. Of his roughly 24 department heads, or secretaries, the Secretary of the Interior (Gobernación) is the most powerful and often succeeds to the presidency. On behalf of the President, Gobernación intermediates between the federal government and the states and adjudicates interstate or federal-state disputes. His power is reinforced by the federal government's virtual monopoly over the important avenues of taxation.

The legislature is bicameral: the Senate has two members from each state and the Federal District for a total of 60 members; the Chamber of Deputies has around 180 members, chosen on a population basis. Minority parties are granted special representation in the form of party deputies who are named by the parties. Their numbers vary with voting percentage achieved, such that the Chamber of Deputies can have a maximum of 258 members. Senators serve for 6 years; deputies for 3, and neither can serve more than one term in a row. The Congress has a permanent committee of 29 members which sees to legislative interests when the legislature is not in session.

The judicial system is headed by a Supreme Court of 21 members; their chief justice is chosen annually from among them on a rotational basis. The members are appointed by the President and the Senate and serve for life, on good behavior. The justices are usually divided into four sectional courts covering civil, criminal, administrative, and labor matters. They sit in plenary session for certain special administrative and other subject matter specified by law. The Supreme Court appoints the magistrates of the lower federal courts.

The structure and operation of state and local government are precribed in some detail in the Constitution, and the President and the ational legislature are given rather sweeping powers to direct and nfluence legislation and administration at lower levels.

Government today rests upon a unique party system that has had reat success in generating loyalty and support throughout the popuace. Within this system, those who actually exercise effective control ver the Revolutionary machinery are the key individuals in the PRI oalition.

In common with many other developing nations, large numbers of ural Mexicans are migrating to the cities hoping for increased ecoomic opportunity. With increasing human displacement has come he pressure of an accelerated urbanization and the concomitant rise f depressed urban social sectors. Recognizing the threat of alienation nd instability in the urban areas, the government has taken steps, hrough policies of long-range planning, to avoid the potentially damging consequences of uncontrolled urbanization.

Much of the effectiveness of governmental adaptation to urbanizaion depends upon state governors, who set general norms for the dministration and allocation of fiscal resources. Intense citizen presure upon Mexico City for relief from excesses of any state regime an lead to presidential intervention.

Welfare is almost entirely a federal program designed to benefit oth urban and rural areas. The government offers a range of welfare, ublic works, agrarian, and general financial services that serve to nfluence the attitudes of individual Mexicans toward support of the tate. Mexico's relative political tranquillity and social stability testiies to the effectiveness of its present governmental system, and the eople feel that their Revolution is not over.

CONSTITUTIONAL DEVELOPMENT

As of 1959, the 20 Latin American republics had had 186 constituions since achieving their independence: an average of 9.3 each. Mexico has had five in this period: 1824, 1836, 1843, 1857, and 1917.

The Constitution of 1824

The creoles who led the movement for independence in 1821 faced several large political issues: those of liberalism versus conservatism, centralism versus federalism, and the intertwining of church and state versus their separation. The Constitution of 1824 was influenced by the Spanish (the liberal 1812 Constitution of Cádiz which had in turn been strongly influenced by the French Revolution) and by the Americans; it provided for a federal republic, division of powers, and a bicameral legislature.

Dr. Ramón de Arizpe was the principal architect of the Constitution, and he was not in favor of strong central government nor political power for the clergy. But while the document prescribed a federal republic, a three-branch government with division of government and religious freedom, it also contained a provision whereby in emergencies the chief executive could have overriding authority, and this provision was exercised. The constitutions written in 1836 and 1843 were more overtly centrist, for federalism was abolished and many elitist privileges were brought back, permitting, for example, the strongman rule of Santa Anna.

The Constitution of 1857

A reform movement reached its zenith with a series of laws restricting the freedoms (*fueros*) of the clergy. In 1855 a reform law severely limited the power of ecclesiastical and military courts. This law came to be known as the Juárez Law, named after its author, Benito Juárez. These laws were incorporated into the Constitution of 1857, which sought to destroy the Church's temporal power base by depriving it of all of its real property except that specifically used for locating churches and related ecclesiastical activities. It provided for civil marriage and for civil registries of deaths and births, removed cemeteries from clerical control, and required priests to celebrate the sacraments for persons regardless of their ability to pay.

The writing of this constitution followed a long period of strife between liberals and conservatives. With the liberals in the ascendancy, federalism was reestablished together with a bicameral legislature with more power to counter that of the executive. It was similar in form to the Constitution of 1824, though it abolished the special courts, called for the direct popular election of the president, and provided many guarantees of personal liberty.

There ensued the War of the Reform; the clergy and proclerical factions had gained control, and Juárez and his followers engaged them in a bloody battle. They were successful, and Juárez became President in 1861, a short-lived victory since French intervention, eventuating in the installation of Maximilian as emperor, followed soon after (see ch. 3, Historical Setting).

During the long dictatorship of Porfirio Díaz—which followed the death of Júarez, the collapse of the reform movement, and the interlude of Maximilian's rule—the 1857 Constitution gradually ceased to be the functioning organic law of the state, and the constitutional guaranties were effectively abrogated for the most part. The clergy and landed gentry once again dominated the state and the government along with Porfirio Díaz's positivist intellectual advisers (the "scientists"—*científicos*). Thus a rule by edict almost entirely supplanted constitutional processes during the three decades 1877–1911.

The Constitution of 1917

A new era of Revolution was ushered in by the resignation of Porfirio Díaz in 1911. It is out of this, the Great Revolution (as contrasted with the earlier La Reforma), that the Constitution of 1917 emerged. President Venustiano Carranza called a constitutional assembly into being in 1916; the following year it produced a constitution, which is still the organic law of Mexico. Many of the features of the Constitution of 1857 were carried forward to the 1917 document, but significant aspects of social revolution were added.

THE CONSTITUTIONAL SYSTEM

The 1917 Constitution bears a general resemblance to that of the United States, but several matters of public policy are treated explicitly which are not called out in the United States document: the clergy are limited to purely religious activities; the nation has original ownership of all lands and waters. These may pass to private property but the nation retains direct ownership of all natural resources in the subsoil continental shelf and inland waters; land reform measures and details of the conditions of labor and social security are included.

Reelection is prohibited for the President, and consecutive terms are disallowed for the Congress. A very strong executive emerges, and the total pattern is repeated and detailed in the state constitutions so that the strong central executive extends across and into the state and local governments.

The President must be a native of Mexican parents and at least 35 years old. There is no Vice President, and in case of death of the President, Congress decides his successor. Under Article 89, the President has broad appointive powers reaching well into the military establishment, the territories, and many regional offices. Although he does not appoint state governors, he has an almost unlimited power to remove state and local officials. He has total control of foreign relations. The President orders the introduction of laws in Congress and has a total or item veto over all legislation that is passed by Congress. There is no constitutional way for the Mexican Congress to override a presidential veto. One of the President's most powerful executive tools is his control over the budget, which is normally approved by Congress. It is the strength of the office of President which gives PRI leadership one of its principal levers on the functioning of the government.

Twenty-nine states, two territories, and the Federal District comprise the Federal Republic. Most of the states show organizational patterns similar to those of the early years of independence. The formal federal-state relationship is like that in the United States, except that the Mexican states have much less autonomy. The Republic is predominately rural. A majority of the population lives in isolated communities not linked to major centers of communication. The states have some autonomy but have never had sovereignty. The present federal regime is not the result of a compact between independent states; rather the states have been created by the government of the Republic. Some historians contend that federalism was introduced at a time when the nation's political maturity did not warrant it.

The states are on a basis of legal equality with each other, but they do not have a right to secede. They are represented in a two-house national congress in a manner similar to that of their American counterparts. The newest state, Baja California, was admitted in 1953. Admission of new states and the conversion of territories into states is done under the aegis of the national congress. States may fix their boundaries by mutual agreement and with the consent of Congress. Congress may adjust state boundaries except in cases where there is a controversy defined as "justifiable" (Article 73, IV) in which the decision is left to the Supreme Court.

Reserved powers are conceded by the Constitution to the states but the power of the states is curtailed by the concurrent powers which the states share with the national government and by the positive and negative obligations which the Constitution imposes on the states. The states must have a popular representative government which is republican in form. In local government the basic unit is a free municipality. The states must not, without consent of Congress, levy import or export duties, maintain permanent troops, or make war except in case of invasion or its imminence. Under no circumstances may the states usurp any of those powers exclusively delegated to the national congress. The states must surrender criminals wanted in other states, publish and enforce federal laws, grant full faith and credit to the public acts, registries, and judicial proceedings of the other states.

The first 29 articles of the Constitution of Mexico contain civil rights guaranties which are limitations on the states and municipalities as well as on individual persons and the central government. The states are given specific powers to grant professional licenses (Article 4), acquire and use real property for public purposes and for taxation (Article 27), and to expropriate agrarian properties within their areas (Article 27). Subject to the limitation mentioned earlier, the states may settle their boundary questions and may initiate legislation in the federal congress (Article 71).

The central government has the constitutional obligation to protect the states against uprising or turmoil. Article 122 provides that upon the request of the governor of the state, protective intervention from the federal government may be made available. However, the federal government has in the past intervened in the affairs of state under Article 76 without affording any protection of state's rights through he federal courts. The effect of Article 76 is to give the Senate powers o decide when and if the governor of a state should be replaced and hen, by a two-thirds vote, to approve a nominee for the gubernatorial eplacement, who is selected by the President of the Republic.

The tax structure of the Republic is one of the most complicated facets of federalism. Since two or all three of the levels of government perform or participate in financing a number of services, there is no standard way of determining which will do what and by what method of financing. Thus there are many special arrangements among the three levels for certain services in particular states and localities. The striking factor about government spending in Mexico is the preponderance of the federal role at all levels.

The control of constitutionality is the exclusive province of the federal courts: the 46 district and 6 circuit courts, and the Supreme Court of Justice of the nation which make up the federal judiciary. The judicial provisions of the states are independent as long as they do not violate the Constitution or federal laws. The territories and the Federal District have local judicial systems established by federal law.

The Mexican *amparo* is the guardian of the bill of rights. Literally, *amparo* signifies protection, assistance, a human refuge. *Amparo* actions in other countries in Latin America tend to be primarily habeas corpus writs. The Mexican version not only champions the right of physical liberty but safeguards personal equities and property rights as well.

The enabling legislation for *amparo* is found in Articles 103 and 107 of the Constitution and in the subsequent implementations of the law of *amparo.* Its objectives are the settlement of controversies arising from (a) laws or acts of federal or state authorities which violate individual guaranties, (b) laws or acts of federal authorities which injure or restrict the sovereignty of the 29 states of the union, and (c) laws or acts of the states which violate the federal sovereignty "Acts" of authorities include denial of justice in civil or criminal suits, in final judgments of the courts, and illegal acts or acts beyond the authority of government officials in the discharge of their functions. The majority of *amparo* actions in the federal courts has been in connection with violations of the constitutional guaranties of individuals. However, with regard to all three categories, they are effective only as to individual plantiffs (natural or corporate) who request the protection of *amparo.* In conflicts between laws of the state and those of the Republic, the only question to be solved by the court concerns the injury caused to an individual thereby and not the equity or inequity of the conflict itself.

The guarantee of individual rights is done in much greater detail than it is in the United States Constitution. The use of the Mexican *amparo*, moreover, is limited as a remedy to the protection and relief of the individual plaintiff who invokes it. It cannot be raised ex officio by the courts in an effort to defeat a law believed to be unconstitutional. The party requesting relief must have sustained an injury as the result of the act or law being challenged. The fact that an individual believes a law to be unconstitutional does not permit him to bring an *amparo* action on this basis alone. The plaintiff must show real damages or the suit is dismissed. Should the plaintiff die in the course of the litigation, his heirs or associates may not continue the suit. Relief is limited to the injured party. If the infringing act has ceased or the damaging law has been repealed in the meantime, the action must be dismissed.

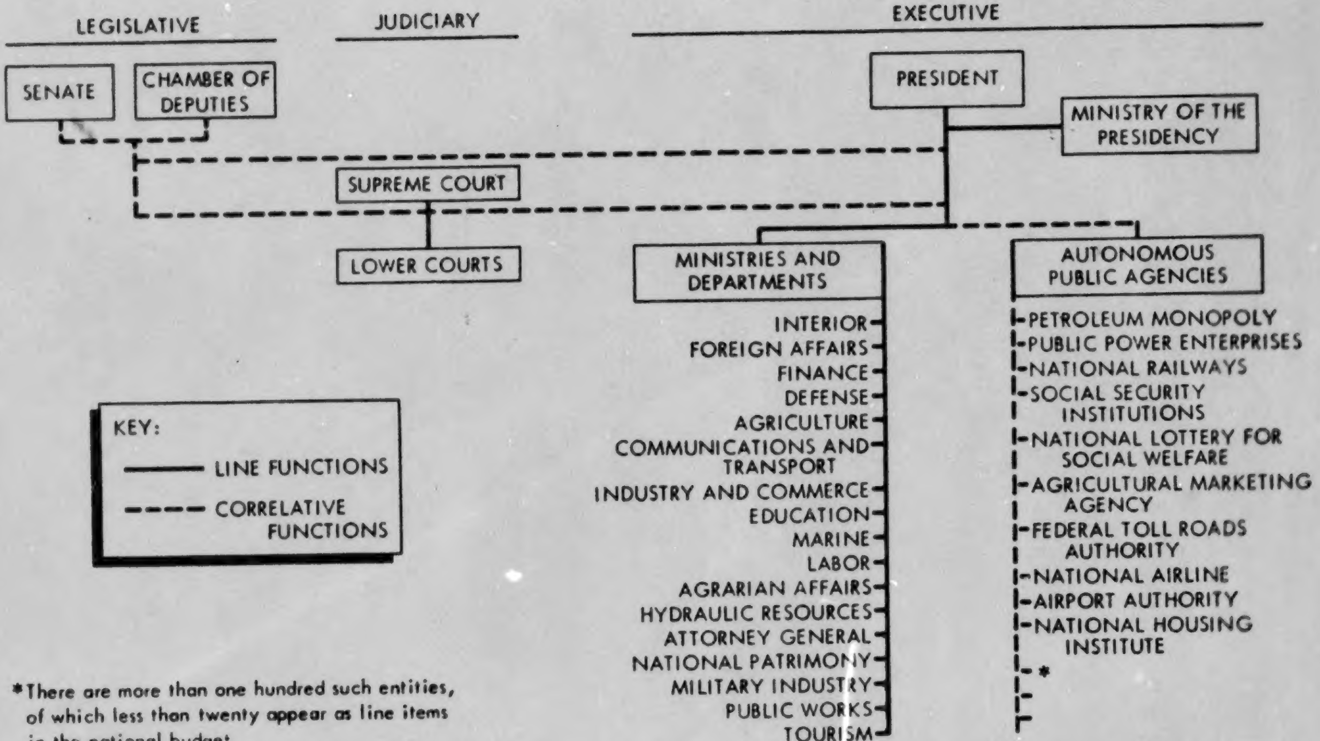
The decision of the court, if one is rendered, is binding only upon the parties themselves and cannot alter or repeal the law. If the courts grant the relief of *amparo* to the plaintiff and the defendant functionary refuses to obey, he is liable for contempt charges in court and subsequent penalities. Where injury is caused by the action of a law, favorable action on a petition merely excuses the petitioner from compliance with the law. The Constitution and the law of *amparo* both emphasize the individuality of the action and of the relief granted, and the courts are prohibited from making a general statement as to the law or act which caused the complaint.

However, there is an important element of the civil law which departs from the Roman tradition and moves in the direction of legal precedent. In terms of the implications of the action of *amparo* for the doctrine of *stare decisis*, or court-made precedent (which is not usually a characteristic of Latin American law), the Mexican law of *amparo* decrees that binding precedent shall be established whenever a series of five *amparo* decisions are rendered on the same legal point by the Supreme Court and done so with a majority vote of four, so long as there has been no interruption in the series by a judgment to the contrary. Thus, the five or more cases will constitute a fixed precedent which is binding upon all federal, state, and local courts, as well as on the special labor courts (Council of Conciliation and Arbitration). The Supreme Court is permitted to reverse its precedent so long as it sets forth a valid reason for doing so relative to the reasons for the original decision.

THE CENTRAL GOVERNMENT

The Executive

In the structure of the Mexican government, probably the most powerful man beneath the President is the Minister of the Interior, an office roughly equivalent to a combination of the Departments of Justice and of the Interior of the United States (see fig. 14). President


LEGISLATIVE
JUDICIARY
EXECUTIVE
SENATE
CHAMBER OF DEPUTIES
SUPREME COURT
LOWER COURTS
PRESIDENT
MINISTRY OF THE PRESIDENCY
MINISTRIES AND DEPARTMENTS
INTERIOR
FOREIGN AFFAIRS
FINANCE
DEFENSE
AGRICULTURE
COMMUNICATIONS AND TRANSPORT
INDUSTRY AND COMMERCE
EDUCATION
MARINE
LABOR
AGRARIAN AFFAIRS
HYDRAULIC RESOURCES
ATTORNEY GENERAL
NATIONAL PATRIMONY
MILITARY INDUSTRY
PUBLIC WORKS
TOURISM
AUTONOMOUS PUBLIC AGENCIES
PETROLEUM MONOPOLY
PUBLIC POWER ENTERPRISES
NATIONAL RAILWAYS
SOCIAL SECURITY INSTITUTIONS
NATIONAL LOTTERY FOR SOCIAL WELFARE
AGRICULTURAL MARKETING AGENCY
FEDERAL TOLL ROADS AUTHORITY
NATIONAL AIRLINE
AIRPORT AUTHORITY
NATIONAL HOUSING INSTITUTE
*
KEY:
LINE FUNCTIONS
CORRELATIVE FUNCTIONS

*There are more than one hundred such entities, of which less than twenty appear as line items in the national budget.

Figure 14. Structure of the Mexican government.

Díaz Ordaz held this post until his selection as the PRI candidate for the 1964 election. Gobernación has been a major prize for competition within the Mexican power structure. Beneath Gobernación and the other Cabinet posts is the Congress consisting of a Senate and a Chamber of Deputies. The PRI has always controlled the Senate. The PRI's control over the Chamber has never been seriously challenged. In 1958, the Party for National Action (Partido de Acción Nacional—PAN) and the Socialist Pouplar Party (Partido Popular Socialista—PPS) elected only one member to the Chamber of Deputies. The introduction of proportional representation in 1964 raised the PAN's total of deputies to 20 and that of the PPS to 10. Opposition parties have never been able to win Senate seats away from the PRI.

Below the President's Cabinet, appointed by and exclusively responsible to him, is an extensive network of administrative structures. The laws which are administered through these structures derive nominally from Congress. However, the powers of Congress are almost entirely subordinated to the office of the President.

The Congress

In the Chamber of Deputies in the Congress, each Deputy and his Alternate are elected by a direct popular vote from congressional districts for a period of 3 years. Consecutive terms are prohibited, but an Alternate and a Deputy can sometimes switch jobs from term to term. Resignations and deaths make the exact number of Deputies a figure that is often subject to change. The Senators are elected for a 6-year term to correspond with that of the President.

Both the Chamber of Deputies and the Senate have some exclusive prerogatives which are somewhat nominal in view of the strong executive system. The Chamber of Deputies approves the annual budget, discusses taxes, and verifies election returns. It considers accusations made against public officials and can bring impeachment proceedings before the Senate. The latter body has the exclusive power to ratify treaties as well as high presidential appointments. It also can declare that the constitutional powers of a state have "disappeared," or that a "conflict of arms" disturbing to constitutional order has arisen, permitting federal intervention to designate a provisional state administration.

Legislation may be introduced into the Congress by the President of the Republic, by senators or deputies, or by an act of a state legislature. Law proposals, so introduced, are given a preliminary reading and then referred to an appropriate commission or subcommittee for study and recommendation to that body of Congress in which the given proposal was introduced. Upon being passed by one house, a bill is automatically submitted to the appropriate committee of the second house (without an additional formal reading) for consideration. A procedure similar to that in the United States Congress then ensues in which joint committees of the two houses must work out a compromise version of a bill that is passed in different version by both. A bill rejected by one house is considered dead until it has been reintroduced through the above channels. A regular calendar of approved bills (those which have cleared committee) is maintained, but a two-thirds vote of the members of either house is sufficient to amend the order established on a given calendar. Private interests seeking to introduce legislation must present their petitions to the presiding officer of the given legislative branch and through his good offices have their initiative presented by a qualified member of that house.

The Judiciary

The judicial branch of the government consists of a federal judiciary and a system of state courts. In addition, there is a system of labor management, quasi-judicial tribunals known as the *consejos de conciliación y arbitraje*. With approval of the Senate, the President names the judges of the Supreme Court who in turn appoint judges for the lower courts. Should the President wish to remove a judge who has been constitutionally appointed, he needs congressional approval. In actual practice, however, the political system offers numerous ways of removing justices.

The Supreme Court is organized into four general chambers, or *salas*, corresponding to substantive areas: civil, criminal, administrative, and labor, with a fifth sometimes sitting for other matters. Mexican law does not depend upon the doctrine of *stare decisis*, or court-made precedent, but rather it depends upon absolute principles that are compiled by legislatures and jurists—in the Roman as contrasted to the English common law tradition. Civil law is thus a comprehensive system and is characterized by voluminous codes and strictures. The legal tradition thus is not that law is to be discovered by a judge, but rather that it is to be created by the Congress. Because of the superior power of the executive branch, the courts have not generally been major agents for socio-economic change.

CIVIL SERVICE

Mexico has no competitive merit system of examination for civil service appointments in the usual sense. Recruitment and training of personnel occur within a relatively limited circle of membership within the context of the PRI. Whether or not a person is considered a professional civil servant is largely a function of the amount of time he has been able to spend in that position. Especially at managerial levels, such as bureau executives, rotation in office on the basis of patronage is the normal rule. Particularly, family ties such as the extended family, or *compadrazgo*, are very important in civil service appointments. Thus a civil servant attains to his position largely because of informal factors of influence (see ch. 7, Family).

STATE AND LOCAL GOVERNMENT

Provision of public services to urban areas is largely a function of state governments which levy taxes, receive federal subsidies, and, in turn, make subventions to municipalities. The basic taxes which support state regimes are levied upon property, sales and commerce, gasoline, alcohol, interest, inheritance, income tax on salaries, and special assessments for public works.

The *municipios* have relatively little power to tax or to mobilize fiscal resources through bonded indebtedness. With respect to taxation alone, the sales taxes belong to the state and federal governments. Property tax is a state prerogative, so the only remaining tax base for the *municipio* is the issuing of business licenses and various permits for street vendors and miscellaneous small-scale activities.

Several major services are provided on a shared basis between federal, state, and local levels of government. Main highways and state roads are constructed and maintained by the federal highway department (the Secretaría de Comunicaciones y Obras Públicas—SCOP), the state governments, and local private initiative on an equal basis of 33 percent each. Private initiative, in this case, may be a local government or, more usually, a local civic group. The similar financial arrangement prevails in the area of domestic water service, with the three levels of government assuming respective amounts of 20, 50, and 30 percent each.

THE ELECTORAL SYSTEM

The proportional representation electoral system went into effect in 1964 and was a major feature of the Díaz Ordaz campaign. The law provides for what is termed a "mixed" system of proportional representation. This law applies only to the Chamber of Deputies; senatorial seats, two from each of the 29 states and two from the Federal District, are won by popular plurality vote. A registered party can win seats either on a plurality basis in an individual electoral district, or on the basis of deputies at large, known as *diputados de partido*.

To secure election of deputies at large, a party has to win at least 2.5 percent of the total national vote for deputies. This rule is a means of eliminating parties which contest in only a few states. Winning this percentage means an automatic receipt of five deputy seats, and one additional seat is awarded for each one-half percent of the national total, up to a limit of 20 seats. In the 1964 election, two PAN candidates for the Chamber were declared winners in electoral districts in León and Chihuahua. In addition, the party received 18 deputies at large as a result of its percentage of the total national vote. The PPS won ten deputies by means of proportional representation, and the Authentic Party of the Mexican Revolution (Partido Auténtico de la Revolución Mexicana—PARM), a right of center and Catholic-oriented party, won five.

The President is elected by direct popular vote by married citizens (by birth or naturalization) who are 18 years of age or over or unmarried citizens 21 years of age or over. In addition to choosing the President and the National Congress, elections are used to fill state and municipal legislative offices with state and local executives maintaining their right to choose their own administrative team. Groups that are included in the suffrage are generally those that maintain ties with the PRI. The principal sectors of the PRI are labor, agrarian, and the popular sector which since the early 1940's has included a number of professional, military, and business groups. On the periphery there are non-PRI-affiliated groups that from time to time are allowed to participate within the competition for congressional offices. Recently the PAN has had increasing success at winning the mayorships of a number of smaller Mexican cities (see ch. 14, Political Dynamics).

The Ministry of the Interior (Gobernación) sets up a Federal Election Commission which supervises the lesser electoral tribunals in the management of elections. Elections for President and for Congress take place on the first Sunday in July every 6 years. Additional elections are held every 3 years for the Chamber of Deputies. While changes from a PRI-dominated government have not taken place through elections, campaigning and voter participation continue to be vigorous.

CHAPTER 14

POLITICAL DYNAMICS

As of mid-1968, real legislative motivation in Mexico comes from the executive branch of government, with attention to popular demands; the government has long been dominated by the Institutional Revolutionary Party (Partido Revolucionario Institucional—PRI and its predecessors, and it has extensive popular support. The legislative process is for this reason largely formal.

The PRI has been traditionally an unchallenged force that embodies the symbols of nationalism and group attachment that were generated by the Mexican Revolution; it represents itself as sole claimant to continuity with revolutionary leadership and ideals, and has proved sufficiently flexible to include in its membership a broad spectrum of political beliefs. In the 1960's a new wave of political forces have opposed its dominance and to some extent eroded its strength, but have not threatened the continuation of its dominance.

The PRI has produced such leaders as Lázaro Cárdenas and Adolfo López Mateos, revered for their campaigns to eliminate misery and injustice. They represent for numerous Mexicans the best definition of revolutionary goals, a concept that—though too vague to be susceptible of definition—is popularly considered the starting point of all that is best in Mexican social, political, and economic change.

Because the PRI and its supporters dominate the communications systems, succeeding governments have been able to propagate the party's revolutionary mystique, laying claim to the symbols of national cohesion and affection. The PRI also dominates such services as social security, socialized medicine and hospital care, assistance to the poor, and others, and such benefits as political patronage and public works projects. In addition, it claims responsibility for the country's economic growth and stability and for the emergence of a national society that is, in the main, free of major problems of socio-political unrest.

The Mexican political scene in 1968 consists of the official group of power holders, the group's internal divisions and subgroups, and a system of cooperating and opposing parties. Access to the "revolutionary family's" own leadership is restricted largely to those who can be assimilated without displacing, or threatening to displace, established participants; this means that merger with other parties is effectively blocked. In September 1967, the principal opposition party, the Party of National Action (Partido Acción Nacional—PAN) moved to a more moderate position, becoming a center party rather than a party of the right; it then capitalized on its broader base to win a handful of state and local offices in Merida, Uruapan (Michoacán), and a small town in Puebla, formerly held by PRI members. Observers believe that these, coupled with a summer 1967 victory in Hermosillo, are an indication that the Mexican interparty political system is becoming more genuinely competitive.

Although the PAN is considered by most observers to be Mexico's principal party of the opposition there are other groups which are registered as legal parties. Among these are the Authentic Party of the Mexican Revolution (Partido Auténtico de la Revolución Mexicana—PARM) and the Popular Socialist Party (Partido Popular Socialista—PPS). The PARM is often viewed as a conservative appendage of the PRI. The PARM normally collaborates with the dominant party and enjoys representation in the Chamber of Deputies. The PPS carries the ideological heritage of the late Vicente Lombardo Toledano, and Latin America generally. PPS also enjoys representation in the Chamber of Deputies.

Mexico also has several parties and political groups that cluster about the fringe of the legally recognized system but which do not have legal registration permitting them to appear on the electoral ballots. Examples of such groups are the National Union of Anti-Anarchists (Unión Nacional Sinarquista—UNS) and the National Liberation Movement (Movimiento de Liberación Nacional—MLN). These groups are not recognized as legal political parties by the Mexican government because of their failure to satisfy membership requirements as prescribed by law. Therefore, their function is generally limited to the role of pressure and propaganda activities. With few exceptions, these groups have relied upon peaceful means for dramatizing their differences with the incumbents of the Mexican government. In addition to these out-groups the Mexican university students constitute another, albeit amorphous, political force whose potential was evidenced during riots and protest rallies which occurred during 1968.

POLITICAL DEVELOPMENT SINCE THE CONSTITUTION OF 1917

Following the consolidation of Revolutionary forces that occurred under the leadership of Venustiano Carranza after 1917, General Álvaro Obregón was proclaimed President for a 4-year term in 1920. He tried to implement the land reform promises of the Constitution, as his predecessor had failed to do, and he carried out an ambitious program of public education and land reform under the guidance of

e philosopher, José Vasconcelos. Despite an attempted coup by
dolfo de la Huerta, Obregón turned the Presidency over to Plutarco
lías Calles, the constitutional President-elect, in 1924.

Calles emphasized the implementation of the anticlerical provisions
the Constitution. He confiscated Church lands, abolished religious
struction in public schools, deported foreign priests, forbade the
earing of religious habits in public, and in general waged a campaign
gainst religious privilege. A counterrevolution of rightists and cleri-
l extremists, under the banner of the *cristeros*, or defenders of Christ,
upted in defiance of Calles.

Once again during the year 1928, the question of the presidential
ccession threatened to bring civil strife upon Mexico as rival factions
the military sought to impose their favored candidates. Although
e constitution prohibited reelection, Obregón's supporters success-
lly brought about his candidacy, and election, but in July, before
e could take office, the President-elect was assignated by a religious
anatic who was allegedly a *cristero* working in the employ of Calles.
o vigorously did Calles denounce the affair, however, and so deter-
ined was his appeal for government by law rather than by passion,
at violence of major proportions was avoided.

In July Congress named Emilio Portes Gil, an intimate and sup-
orter of Obregón, to be provisional President for 14 months. During
is time Calles and his group, which now included Luis Morones,
ormed Mexico's first revolutionary political party (the forerunner
the PRI), the National Revolutionary Party (Partido Revolucio-
ario Nacional—PRN), which held its first convention in 1929 and
ominated Pascual Órtiz Rubio to succeed Portes Gil, Órtiz Rubio
ltimately defeated the philosopher José Vasconcelos in a hard elec-
oral struggle. Subsequently, the Congress challenged President Ru-
io's budget, and out of the ensuing controversy, Órtiz Rubio dismissed
everal pro-Calles members of his Cabinet, and in turn, dictated Órtiz
ubio's resignation and replaced him with Abelardo Rodríguez, a
ealthy militarist and landowner from Baja California: Rodríguez
nished the term faithfully in service to Calles. The left wing of the
NR was angered at Calles' manipulations of the presidency. The new
evolutionaries were able to impose upon him its favored candidate
or president, General Lázaro Cárdenas who was elected President.
short time after assuming office he exiled Calles and began a wide-
nging program of socio-economic reforms.

The Cárdenas era (1934–1940) is one of the great steps of the Mex-
an Revolution during the post-violence period. Lázaro Cárdenas
istributed agrarian lands to peasants more generously than had any
her previous chief executive. He did so via the usufructory device of
idos, or collective farms regulated by the State. Cárdenas provoked
rong conservative opposition by his more strict enforcement of the

anticlerical provisions of the Constitution of 1917. He expropriated the foreign-owned oil industries in 1938, and sought political change internally by reorganizing Calles' old PRN and giving it a new name, the Mexican Revolutionary Party (Partido Revolucionario Mexicano—PRM). At the same time the old Revolutionary Confederation of Mexican Workers (Confederación Revolucionario de Obreros Mexicanos—CROM) of Luis Morones was replaced with the Confederation of Mexican Workers (Confederación de Trabajadores Mexicanos—CTM), which came under the new and vigorous leadership of Vicente Lombardo Toledano. With both Calles and Morones exiled to the United States, Cárdenas governed without serious opposition. His support rested squarely on a broadly based configuration of peasantry, urban labor, and the armed forces.

In 1940 Cárdenas stepped aside and was succeeded by General Manuel Ávila Camacho, who carried on many of the Cárdenas reform programs. Ávila Camacho was matched against the candidacy of General Juan Andreu Almazán whose support came from a number of splinter parties, including the PAN. This foreshadowed the growth of permanent political opposition in contemporary Mexico.

The elections of 1946 and 1952 were comparatively tranquil. The PRM became the PRI during the regime of President Ávila Camacho; this party supported the successive regimes of Miguel Alemán Valdés and Adolfo Ruíz Cortines. Alemán's rise set a pattern later repeated; he rose from governor of a major state, Veracruz, to become campaign manager for Ávila Camacho in 1940, and from that position to Secretario de Gobernación in the President's Cabinet. With the end of World War II, the PRI selected Alemán as a candidate somewhat to the political right of the Cárdenas tradition to promote commercial and industrial development.

The selection of Adolfo Ruíz Cortines as the PRI candidate in 1952 represented only a mild reaction to the conservatism of the Alemán administration, although Ruíz Cortines was one of the more trusted Alemanista who had followed the same route of ascent as had his predecessor and mentor. Ruíz had always been distinguished, even within Alemán's orbit, as being impeccably honest, and Alemán was known to have assigned to Ruíz certain financial custodial tasks which Alemán did not even trust to himself. Under Ruíz Cortines, Mexico's public administration was purged of many of its former objectionable practices, and steps were taken to expand the *ejido* program, public welfare, and other reforms.

In 1958, Adolfo López Mateos brought to the Presidency a distinguished background as a labor mediator and organizer. His service as Secretary of Labor in the Ruíz Cortines cabinet and earlier as an official of the Mexican Treasury had attracted the admiration of ex-President Cárdenas. Also López Mateos was a long-standing friend of Miguel Alemán. Both men supported him for the PRI candidacy.

The election of López Mateos in 1958 was the first presidential election in Mexican history in which the franchise included women. Moreover, part of the PRI's campaign pledge was the institution of a sweeping program of socialized medicine, medical and dental clinics, and maternity care centers intended particularly for rural and depressed urban neighborhoods. López Mateos generally made good this pledge and thereby endeared himself to many Mexicans who otherwise might have remained on the fringes of their nation's political life. The 1958 presidential campaign was one of the most determined, indeed violent, campaigns since the *cristero* riots of the 1920's. The opposition candidate endorsed by PAN was Luis H. Álvarez, an aristocrat and magnetic man who saw Mexico slipping into a Marxian socialism that would end in Communist dictatorship. Álvarez was openly the spokesman for clerical interests and for some members of the financial directorate.

Political stability was the hallmark of López Mateos' regime, despite several naval and border skirmishes with Guatemala, international friction over relations with Castro's Cuba, and the problem of the salinity in the Colorado River water coming from the United States. Despite numerous social and economic problems, the broad range of public service programs and the continued ability of the PRI to meet the majority of demands placed upon it by the Mexican populace continued to make the nation's political system one of the more stable within the Latin American community of nations.

MEXICO'S DOMINANT PARTY: THE PRI

The assassination of President Obregón in 1928 provided an impetus for Mexico's political leaders to band together into an enduring institutional arrangement whereby the nation could spare itself a repetition of the anarchy and bloodshed that had marked the Revolution of 1910–17. As a consequence, 1929 saw the creation of a new party, the Partido Revolucionario Nacional—PRN.

Under Cárdenas, the party was given a new name, the Partido Revolucionario Mexicano—PRM. It was organized into four sectors: agrarian, labor, popular, and military. The agrarian sector contained a number of subsidiary organizations designed to integrate peasants and small landholders into the party. Prominent among these two groups was the National Confederation of Peasants. The Labor sector was integrated around the Mexican Workers Confederation, under the leadership of the socialist intellectual Vicente Lombardo Toledano. The popular sector appealed primarily to urban small businessmen, professionals, students, and public employees, while the military sector was meant to represent the armed forces.

Under President Ávila Camacho in 1946 the Partido Revolucionario Mexicanos became the Partido Revolucionario Institucional. The military sector of the PRI was dropped in 1940 at the start of Avila Camacho's administration as a gesture of demilitarization in Mexico's growing commitment to a civilian stewardship of the revolution. The official party, PRI, thus emerged as the all-encompassing structure which it is today.

Because of the intimate relationship between the PRI hierarchy and the Mexican governmental process, the structure of decision-making and accountability within the party is most important.

Immediately beneath the President of the Republic (who is also the titular head of the PRI since, for more than 30 years, the PRI has dominated the government) is the National Executive Committee (Comité Ejecutivo Nacional—CEN). The president of the CEN is traditionally thought of as the second most powerful man in the PRI. Next there is the organism known as the Grand Commission or the National Council which exercises a watchdog function between meetings of the principal representative body of the PRI, its National Assembly. The National Assembly, through an extensive and complicated subsystem of regional and local organisms, is intended to be the popular voice of PRI. It convenes once every 6 years to establish party policy and to ratify the party's nominee for the Presidency. The National Assembly may also be called (by the CEN) into an emergency session although this has only rarely been done (see fig. 15).

The CEN has more power within the PRI than either the National Assembly or the National Council. The principal powers of the CEN are the following functions, as established by rules effective in 1960: convocation of national assemblies and specification of criteria for choosing delegates, convocation of the National Council and criteria selection for its delegates, supervision of party discipline both with respect to groups and individuals, establishment of special investigatory commissions to deal with regional political problems, and control over a broad range of local and regional political organisms including the state and municipal party committees. The CEN conducts programs of public education and citizenship training and is the nucleus of promotional activity on behalf of party unity and recruitment. Much of the success of the PRI as Mexico's continuing dominant political institution rests on the powers of the CEN.

Apart from the formal hierarchy of the PRI, the party has functional links with Mexican society via a series of organizations. These are organized into sectors. The agrarian or farm sector includes members of the collective farm (*ejido*) program, various organizations of largely unskilled wage-earners who work on private lands, certain skilled agricultural technicians, and a semi-professional group known as the Mexican Society of Agronomists. The agrarian sector has been

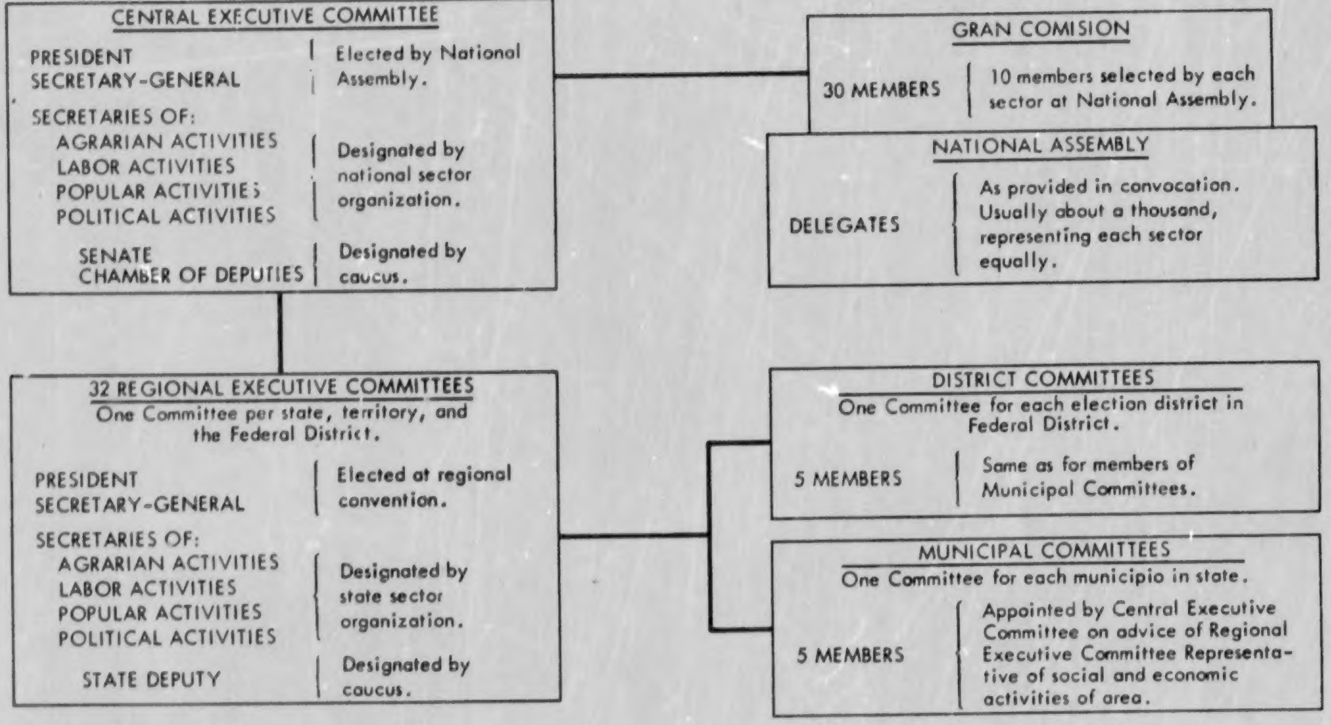

CENTRAL EXECUTIVE COMMITTEE
PRESIDENT
SECRETARY-GENERAL
Elected by National Assembly.
SECRETARIES OF:
AGRARIAN ACTIVITIES
LABOR ACTIVITIES
POPULAR ACTIVITIES
POLITICAL ACTIVITIES
Designated by national sector organization.
SENATE
CHAMBER OF DEPUTIES
Designated by caucus.
GRAN COMISION
30 MEMBERS
10 members selected by each sector at National Assembly.
NATIONAL ASSEMBLY
DELEGATES
As provided in convocation. Usually about a thousand, representing each sector equally.
32 REGIONAL EXECUTIVE COMMITTEES
One Committee per state, territory, and the Federal District.
PRESIDENT
SECRETARY-GENERAL
Elected at regional convention.
SECRETARIES OF:
AGRARIAN ACTIVITIES
LABOR ACTIVITIES
POPULAR ACTIVITIES
POLITICAL ACTIVITIES
Designated by state sector organization.
STATE DEPUTY
Designated by caucus.
DISTRICT COMMITTEES
One Committee for each election district in Federal District.
5 MEMBERS
Same as for members of Municipal Committees.
MUNICIPAL COMMITTEES
One Committee for each municipio in state.
5 MEMBERS
Appointed by Central Executive Committee on advice of Regional Executive Committee Representative of social and economic activities of area.

Figure 15. Organization of the Partido Revolucionario Institucional (PRI) of Mexico.

dominated traditionally by the National Agricultural Workers Confederation (Confederación Nacional Campensina—CNC). The labor sector of PRI consists principally of the Mexican Labor Confederation (Confederación de Trabajadores Mexicanos—CTM) and other smaller confederations. The popular sector is the most difficult to describe. It represents a broad range of professional groups, teachers, government workers and the remnants of the old military sector of the PRI that was abolished in 1940 under the regime of Avila Camacho.

THE SATELLITE SYSTEM OF OPPOSITION PARTIES AND OUT-GROUPS

The PRI occupies the center of the Mexican party spectrum. To its left is a loose configuration of Marxist-oriented groups whose principal ideological bond is a common dissatisfaction with PRI policies. In August of 1961, a convention of prominent leftists, featuring representatives of the Mexican Communist party, the Popular Socialist Party (Partido Popular Socialista—PPS) and a number of other splinter groups, was held in Mexico City. Ex-President Lázaro Cárdenas served as the ideological mentor for this convention. These meetings displayed a broad consensus in favor of nationalization of all natural resources, expulsion of most foreign capital investments, closer ties with Castro's Cuba, and a broad "go-it-alone" policy. The convention also decided that a new leftist entity was needed to cement and coordinate the efforts of the various groups into a unified front. Thus a new movement, now practically defunct, the National Liberation Movement (Movimiento de Liberación Nacional—MLN) was proclaimed.

The MLN immediately called itself a grass-roots organization which ultimately would rival PRI. This image was short-lived, however; during the first year of MLN existence, Vicente Lombardo Toledano took the PPS out of the MLN. His action resulted partly from reluctance to embrace Maoist Communism and partly from rivalry between himself and Lázaro Cárdenas. The Union of Mexican Workers and Peasants, headed by Jacinto López, also pulled out of the MLN only under pressure from Lombardo. MLN adherents countered this blow to their prestige by trying to capitalize on the prestige of Lázaro Cárdenas; they proclaimed a radical campaign to renew his vigorous agrarian reform measures of the 1930's. Braulio Maldonado Sández, ex-governor of Baja California who had left the PRI, called for armed peasant uprisings and insurgent activity in the countryside against the incumbent "traitors" of the revolution. An agrarian reform subsidiary known as the Independent Peasant Front was formed, with Lázaro Cárdenas again serving as titular leader, but supported by a directorate containing members of the Mexican Communist party.

The Mexican Left is divided principally between supporters of Lombardo and Cárdenas. Vicente Lombardo Toledano was famous throughout the hemisphere as the founder of the Latin American Workers Confederation (Confederación de Trabajadores de la America Latina—CTAL). His PPS has dominated Mexico's left because of PPS willingness to come to terms with the PRI on matters of potential ideological cleavage. In the presidential campaign of 1964, PPS, which had existed as the PP since 1948, became an "official" opposition to the PRI and was inscribed as a legal political party by the government. In return, Lombardo, promised to support the PRI presidential candidacy in exchange for assured seats in Congress. This rapprochement further widened the breach between PPS and the MLN, which formed its own campaign front, the Popular Electoral Front (Frente Electoral del Pueblo—FEP), and ran Professor Ramón Danzós Palomino for the Presidency. Danzós Palomino, who was also an official of the Mexican Communist party, was denied inscription as a legal candidate, as was the honored painter, David Alfaro Siquieros, who campaigned for the Senate from his jail cell in Mexico City, as a protest gesture.

Rightist sentiment in Mexico has two principal organizational forms, Unión Nacional Sinarquista, which is largely confined to San Luis Potosí, and Partido Acción Nacional. The term "sinarquista" is a corruption of two words, "*sin*" and "*anarquía*," meaning "without anarchy" or "with order." It is intended to be an order of Christian democracy, first under God, then under a God-fearing state. All Sinarquistas are said to be ardent Roman Catholics. Sinarquistas are disciplined members of a militant theocratic faith and frequently use the word "soldier" in self-description. The ideology *sinarquismo* embraces a strong economic conservatism.

Since 1940 the only formal opposition to the PRI has been offered by PAN, which emerged as part of the Conservative reaction to the socialistic reforms of the Lázaro Cárdenas regime during the 1930's. Principal targets of their attack were the sweeping nationalizations of industry, the stricter enforcement of the anticlerical provisions of the Constitution of 1917, and the hastened distribution of the agricultural lands through the use of *ejidos*. PAN was formed at a Mexico City convention in 1939. Its founder, Manuel Gómez Morín, is still active in the party's national organization. Since its founding PAN has always offered presidential and congressional candidates, except in 1946 when it chose not to contest the Presidency. PAN upholds the Constitution of 1917 except for the anticlerical provisions, as a great instrument of human equality, and charges that the controlling PRI has violated the constitution through administrative abuses of liberty.

Today's *panistas*, or members of PAN, include the *abolengo*, old families of distinguished ancestry whose wealth and position have been reduced or threatened by the PRI, some of the more recently successful business and professional people, many of the upwardly mobile middle class, and an uncertain base of peasants and artisans that Church influence has placed within PAN ranks. PAN has never been officially credited with more than 12 percent of the vote in a presidential election, and thus has not posed a major threat to the PRI in the past.

The presidential succession of 1964 was won, by a wide margin by Díaz Ordaz. The PAN candidate, González Torres, got approximately 12 percent of the 11 million votes that were cast. PAN won one *diputado* by districts and 19 others by means of proportional representation. The election was conducted calmly, with little or no reported violence, and only a few charges of voting irregularities were made. The election was the first in PAN's history in which one of its candidates publicly acknowledged defeat without charging fraud or disparaging the outcome. President-elect Díaz Ordaz openly thanked PAN for its attitude and lauded the concession of defeat as an example of Mexico's maturing democracy.

NONPARTY INTEREST GROUPS

Several of the groups already mentioned qualify as nonparty interest groups, but because of the dominance of the PRI there are few such groups actually possessing the ability to influence events. Among those groups enjoying limited relevance are the Mexican Catholic Action society (Acción Católica Mexicana—ACM) and the National Union of Parents (Unión Nacional de Padres de Familia—UNPF). Such groups are generally considered to be conservative and have pressed for a restoration of clerical privileges to the Church.

To the left of the spectrum is the National Liberation Movement, MLN, that tries to integrate a number of diverse groups. Among these probably the most radical is the Revoluntionary Movement of the People (Movimiento Revolucionario del Pueblo—MRP) led by Raúl Ugalde, a former youth leader most recently connected with the PAN in 1955. Ugalde, the leader of the MRP, was imprisoned during 1968 for his alleged complicity in the derailing of trains. On both left and right there are numerous small groups and factions which represent specific interests and whose description goes beyond the province of this chapter. Again, it bears repeating that the dominance of the PRI has effectively denied any of these groups or confederations a role of major political power.

MEXICAN POLITICS: THE COMPETITION FOR POWER

Through its many communications media and control of governmental powers the PRI has been largely responsible for the socialization process in which Mexicans have learned respect for the symbols of group attachment that unite their nation. Public and private holidays and festivals, official acts, dedications, and sporting events are occasions at which national values are paid homage. Newspapers and magazines regularly devote space to the treatment of historical and patriotic themes. The educational process, especially in the elementary grades, dedicates considerable attention to the patriotic legacies of Juárez, the Revolution of 1910, and a vast number of other such themes.

All of this is intended to build psychological links between the Mexican citizen and his nation. The socialization process, and the control thereof, is an intimate part of the competition for popular support, hence, political power within the Mexican political system. Effective political power is an attribute that is negotiated primarily within the PRI. The principal competitors for power are the sectoral organizations mentioned above and the hierarchical groups which seek to channel their demands upward. Key leaders of these organizations and groups play major roles in the process for negotiating power. Hierarchy is important and any leader who wishes to vie with a superior for power must be confident of broadly based support on behalf of his cause. Not only does the dominant party circumscribe the competition for power but it instills criteria for legitimacy in the competition for power. The party, therefore, may itself be viewed as a legitimizing symbol for control of the competition for power via its monopoly of communications media which link all parts of the "revolutionary family."

Clustered about the PRI are the groups of special interest organizations mentioned above which vie for political effectiveness intermittently and whose focus tends to be issue oriented rather than comprehensive in the sense of total governmental change. It has been argued that some of the opposition groups have enjoyed limited access to political power and influence because they were in part supported by the government.

Certainly it is true that those groups receiving no government or official blessing of any kind are in a disadvantageous position vis-à-vis the power process. Because of the success which the PRI has had in its role as Mexico's principal agent of political socialization, however, the quest for power by most groups has taken place within a legal context and the resort to extra legal methods has been rare. The student riots preceding the 1968 Olympics were examples of such exceptional behavior.

Since the *cristero* revolt during the Calles era and the *sinarquista* protest riots of the late 1930's the Mexican political system has generally been able to absorb demands placed upon it and thereby to avoid recourse to extra legal methods of competition for power. During the fall of 1968, however, there was evidence that suggested the possibility of change in the dominant position of the PRI. PAN's move to the center had been accompanied by victories in the municipal elections of Hermosillo, Sonora, and Merida, Yucatán. In Nuevo León the PAN had already achieved (in 1964) municipal electoral success in the community of Garza García. In Baja California, PAN claimed it won the June 1968 mayorality races in Mexicali and Tijuana as well as a majority in the state legislature. PAN was able to point to the student riots and alleged official brutality as evidence of the need for "an infusion of new blood" in the revolutionary family.

The political issues which face today's Mexico include those of state sponsored capitalism (the corporate state) versus expanded private initiative. Exacerbating the controversy is [illegible] generation gap between those who have been socialized into accepting the current revolutionary machinery with its relatively slow rate of change, and the burgeoning younger generation that is impatient for more rapid change. In mid-1968 it appears that issues, policies, and programs surrounding the controversy over political change are more important to the populace than the individual men who occupy key positions. The President of Mexico continues, of course, to be held responsible for the national destiny.

CHAPTER 15

FOREIGN RELATIONS

Foreign relations are affected by two salient considerations—the desire to maintain a fully independent Mexico and the country's proximity to and joint border with the United States. The spirit of independence was first proclaimed in 1810 by Father Hidalgo, and it has come to fruition under the institutions associated with the Institutional Revolutionary Party (Partido Revolucionario Institucional—PRI) (see ch. 3, Historical Setting; ch. 14, Political Dynamics). Mexico stands for the independence of all nations; non-intervention is so vehement a policy commitment of all recent foreign relations that Mexico is Latin America's only nation still maintaining diplomatic ties with Castro's Cuba. Mexico lost nearly half of its territory to the United States in 1848; this and subsequent interventions have joined to produce a psychology in Mexican political life that prizes independence and non-intervention above all else. On the other hand, increasing economic dependence on international tourism in recent years and the increasing attractiveness of Mexico as an investment ground for foreign capital has tended to reduce the intensity of this feeling.

Responsibility for the direction of foreign policy lies with the Ministry of Exterior Relations, which is located for administrative purposes directly under the Presidency. In recent years, Mexico has been an active partner in the United Nations and the Organization of American States, and has endorsed the ideas of the Alliance for Progress. Mexico has been a strong proponent of the rule of law and strongly supports the sanctity of treaties. Its international relations during the past decade have been generally smooth except for minor friction with Guatemala over questions of fishing and navigational rights and the largely dormant Mexican territorial claims on British Honduras. It has also had intermittent disputes with Cuba over questions involving Cuban diplomats and refugees.

Mexico's need to maintain its own territorial defense has not been great during the 20th century; and its military establishment has not assumed a dominant role in foreign affairs. Pacific settlement of disputes continues to be a key tenet of foreign policy. An apparent anomaly in foreign policy is continued recognition of the Spanish Repulican government-in-exile residing in Mexico City. The overwhelming majority of the citizenry supports its government's foreign policy and takes pride in the manner in which it is executed. Mexican diplomats have achieved respect for their roles in international organizations.

MOTIVATION AND GOALS

Foreign relations are conditioned by a political sensitivity engendered by a history of external armed interventions into Mexican domestic politics (see ch. 3, Historical Setting). These relations are also influenced by the Revolution of 1910, which formulated in ideological terms a revolutionary position in international affairs (see ch. 2, Physical Environment). This revolutionary ideology asserts the independence and "uniqueness" of the Mexican experiment while it rejects a "universal mission" to reach its goals.

Economically, Mexico has profited by its proximity to the United States in the areas of foreign trade and technical assistance (see ch. 23, Foreign Economic Relations). Since the Revolution, Mexican decision-makers have formulated a foreign policy which has been termed "inverted neutrality." While the Mexican government has taken exception to many United States policies in the hemisphere, it has limited some of its more extreme positions in foreign affairs because of the proximity of the United States and the economic desirability of maintaining good relations.

In evaluating and formulating national interests, policymakers take into account the historical vulnerability to foreign intervention, and the ideological implications of the socio-political revolution. The Mexican War of 1848 and the French Intervention (1862–67) began a process of nationalism which culminated in the Mexican Revolution of 1910. This nationalism stresses the "uniqueness" of the Mexican nation as a hybridization of Western and indigenous cultures. *Mexicanidad* is the ideological formulation of what is termed the "unique identity" of the Mexican system. As expressed in foreign policy terms, *mexicanidad* demands adherence to the principles of strict nonintervention into the affairs of other nations while recognizing the self-determination of all peoples.

In the juridical application of these doctrines, Mexican decision-makers have been presented with a dilemma. Because of its own revolution, Mexico has committed itself to the establishment of representative democracy throughout the world as the basis of peace. Thus, Mexico is one of the few nations which continues to recognize the Spanish Republican government-in-exile and refuses to maintain diplomatic relations with the Franco government. Yet Mexico supported the Castro revolution, the Mexican government consistently refusing to meet the demands of Batista to prevent anti-Batista activities from occurring in Mexico. In these cases Mexico's commitment to support the democratic ideal in its foreign policy has presented a dilemma over the priority between self-determination and nonintervention.

The professed policy of the Mexican government is contained within the following principles:

1. The recognition of the free self-determination of peoples and inviolable respect for their sovereignty and political independence.
2. Repudiation of any form of external hegemony.
3. Preeminence of the country's Political Constitution over any other internal or international statutes.
4. Acknowledgment of nonintervention and the principle of judicial equality of states as the bases for international harmony.
5. Respect for the humanitarian right of asylum.
6. Adherence to the cause of peace and peaceful coexistence among peoples.
7. Strict compliance with the United Nations Charter and with the principles of continental solidarity and cooperation as accepted within the inter-American system.
8. Use of arbitration in settling international conflicts.
9. Recognition of the usefulness of international economic and technical cooperation on a worldwide or regional scale, as long as the foregoing principles are observed.
10. Equity in economic and commercial relations.
11. The need to expend individual and joint effort in reducing the profound inequalities existing between standards of living in underindustrialized countries and those existing in nations more advanced economically.

TECHNIQUES AND CAPABILITIES

Foreign policy posits strict compliance with the principles of international law as the only bases upon which states should conduct relations with each other; it holds that international cooperation and peace can be fostered only by a firm adherence to nonintervention and self-determination of all peoples. By virtue of formal commitment to these principles, Mexican President López Mateos declared: "Our international behavior will conform . . . to two fundamental rules: to accept nothing that will endanger our sovereignty, and to cooperate unfailingly in any effort that might serve effectively to increase harmony among the nations of the world or improve man's living conditions."

While the country supports a norm of state behavior based upon the precepts of international law, it vigorously asserts state sovereignty as the prerequisite to any type of internationalism. It supports the principles of collective defense against armed attack, as evidenced by participation in international and regional organizations. But it has abstained from contributing any financial aid or personnel to the various collective operations carried out by the United Nations. Apparently, the government feels that the principles contained in these organizations are of primary importance, but that the implementation of certain aspects of them might limit the country's sovereignty.

Because of its historical experiences and geographical position, Mexico is sensitive to any policy which might limit sovereignty or serve as a pretext for external intervention into internal Mexican affairs. While espousing the principles of international cooperation, the establishment of representative democracy, self-determination of all peoples, and racial equality, the country maintains a position of isolationism which is reinforced by its interpretation of the "uniqueness" of the Mexican situation.

Thus, the principal means used in conducting foreign relations is nonpolitical diplomacy. The country frowns upon any use of military force to settle diplomatic disputes. Its refusal to enter into a bilateral military assistance pact with the United States in 1952 indicates its distaste for military alliances. Consistently, Mexico has opposed any type of collective intervention into the domestic affairs of another state. During the deliberations of the Organization of American States (OAS) over the question of Cuba, Mexico refused to participate in applying any type of diplomatic or economic sanctions to the Cuban Government. Foreign Minister Andrés Tello warned that the pretext of extra-continental invasion was being used by the OAS in the Cuban case to justify the abrogation of the principle of nonintervention.

The absence of any serious diplomatic dispute with any of the nations with which it maintains diplomatic relations indicates the pacific nature of the country's foreign policy. With the exception of slight military skirmishes in alleged Mexican territorial waters with ships of Guatemala and the United States, there has been no visible evidence of the threat or use of military force as a part of Mexican foreign policy. Boundary disputes, as well as nonpolitical controversies, have been handled by the Foreign Ministry through pacific diplomatic channels. A myriad of conventions and treaties entered into by Mexico in the post-war years attest to its commitment to settle all international problems through diplomatic negotiation.

Regular military groups have become highly professionalized and less politically-oriented than those in other Latin American countries. The defense establishment receives slightly less in budgetary allocations compared to counterparts in Latin America; nevertheless it is an efficient organization capable of defending the country from foreign aggression. Significantly, the geographic proximity of the United States makes such defense secondary, since any invasion attempt upon Mexico would constitute a grave threat to United States security. Therefore, the government can pursue peaceful means in settling international disputes without fear of encountering superior external military force. Mexico thus has been able to base its foreign policy upon a moral commitment to international law and international conciliatory agencies rather than upon expediency forced by external threat.

RELATIONS WITH SELECTED COUNTRIES

The United States

Mexican and United States foreign policies have greatly interacted. Historically, four phases of diplomatic intercourse can be discerned. From 1822 until 1917, most diplomatic interchange concerned territorial boundary disputes and resulted in three major United States military interventions. The second phase of diplomatic activity arose from the Mexican Constitution of 1917, which contained many socioeconomic provisions impinging upon private United States investments in Mexico. The activities of the revolutionary Mexican governments during this period subjected diplomatic relations between the United States and Mexico to great stress (see ch. 3, Historical Setting).

During and immediately after World War II, a third phase of unprecedented military and technical cooperation between the two nations occurred. In the fourth phase (since 1952), Mexico has attempted to follow a neutralist position *vis-à-vis* United States involvement in the "cold war." Mexico maintains cordial relations with the United States, but follows an independent hemispheric and international course consistent with its ideological formulation of foreign policy.

Relations between Mexico and the United States entered a new phase with the advent of World War II. The early 1940's saw unprecedented cooperation between the two countries.

In 1942, Mexico severed all diplomatic relations with the Axis and declared war. Reciprocal military and political agreements were signed by the two nations. Mexico participated in and supported all hemispheric collective defense agencies. In the Americas, Mexico received the second largest lend-lease installments from the United States (US$38 million). Economic cooperation was evidenced by the creation of a joint commission in 1943 to make recommendations to meet any economic problem arising in either nation's production level. The Water Treaty of 1945 provided for the creation of joint flood-control projects and the equitable distribution of water from contiguous rivers. In the immediate post-war years, the United States and Mexico continued to further economic and technical cooperation.

Mexico's refusal to enter into a bilateral military assistance agreement with the United States in 1952 marked the fourth phase of relations between the two nations. In the context of the "cold war," the threat of international communism establishing a base of operations in the hemisphere had been of critical concern to the United States. This appeared especially ominous to some with the establishment of the Arbenz regime operating out of Guatemala. To avert the possibility of a Communist base of operations in Latin America, the Caracas Conference of 1954, spearheaded by the United States, adopted a resolution stating that the domination and control of any American state by international communism was to be deemed a threat to all American states. This anti-Communist resolution met with an abstention from Mexico, which claimed that this declaration compromised the principle of nonintervention.

The appearance of the Castro regime in Cuba and its alignment with the Soviet bloc created another security problem for the hemisphere, and again Mexican foreign policy displayed a neutral position in OAS deliberations. In July 1964, the Ninth Meeting of Foreign Ministers of the OAS, serving as an Organ of Consultation in the application of the Rio Treaty, adopted a resolution imposing diplomatic and economic sanctions against the Cuban government. Mexico was the only member state which refused to comply with the resolution and which continues to maintain diplomatic relations with Cuba. As a signatory to the Inter-American Treaty of Reciprocal Assistance of 1947, or the Rio Treaty, Mexico was bound by the decision of the Organ of Consultation to suspend relations, but the Mexican government claimed this would constitute intervention into the internal affairs of Cuba, and that also for "humanitarian reasons" Cuba should not be isolated from the rest of the hemisphere.

Thus Mexico's refusal to support United States efforts through the OAS to combat Latin American Communist governments marks a departure from the politico-military cooperation of the two nations during World War II and the immediate post-war years.

Foreign policy in this fourth phase stresses political independence from the United States and assumes a friendly neutrality toward its northern neighbor's "cold war" with the Soviet Union. The country continues to cooperate with the United States in the areas of technical and economic aid. As a participant in the Alliance for Progress, it was designated to receive US$600 million in aid to fulfill President Kennedy's desire that Mexico become the showpiece of Alliance policy.

In June of 1967 an agreement on Mexican exports of textiles to the United States was reached, and in July, the two nations agreed on a flood control project for the Tijuana River.

The Communist Bloc

In 1924, Mexico recognized the Government of the Soviet Union. Yet, by 1927, Mexico had broken off diplomatic relations as a result of pronounced Soviet activity in Mexican domestic politics. Relations were resumed prior to World War II, and they have remained cordial since then. While Mexican foreign policy does not contain an anti-Soviet line, the country has not entered into any technical assistance agreements with the Soviet Union.

Mexico has not recognized the People's Republic of China and has consistently voted against its admission into the United Nations. Mexico continues to maintain relations with the Chinese government based in Taiwan.

Cuba has provided the most vexing diplomatic problem for Mexican foreign policy in recent years. The Mexican government expressed open diplomatic hostility to the government of Fulgencio Batista. When Fidel Castro achieved power, the Mexican government recognized his administration.

At the Seventh Meeting of Consultation of Foreign Ministers at San José, Costa Rica, in 1960, the United States highlighted the danger presented by Cuba to hemispheric security. Mexican Foreign Minister Manuel Tello stated that the Cuban experience demanded patience on the part of the American states and that their task would be to make Cuba feel that its destiny was in America. The Mexican government took exception to the Declaration of San José by claiming that collective action would endanger the principle of nonintervention when an alleged case was not clearly an extracontinental threat to peace and security.

After the abortive attempt at the invasion of Cuba by anti-Castro exiles in April 1961, the United States requested a meeting of consultation of the OAS to consider the threat by the Soviet Union and Cuba to hemispheric security. Mexico opposed the calling of such a meeting. Despite this opposition, the eighth meeting was held in Punta del Este, Uruguay, and by the necessary two-thirds majority vote Cuba was suspended as an OAS member. Mexico opposed this move claiming that it was juridically impossible under the existing OAS Charter to exclude a member state from the organization. Mexico demanded that such procedure could occur only after amending the charter. This meeting concluded with a resolution suspending trade with Cuba, on which Mexico abstained from voting.

As of 1962, Mexico, Bolivia, Brazil, Chile, and Uruguay were the only OAS member states maintaining diplomatic relations with Cuba. At the Ninth Meeting of Foreign Ministers in July 1964, a mandatory declaration for member states to suspend diplomatic and economic relations with Cuba was issued. Mexico vigorously denounced this as intervention and refused to adhere to the OAS ruling. As recently as September 1967, the country refused to vote in favor of expanding economic sanctions imposed upon Cuba, while it supported, at this same conference, a resolution which called for the immediate reporting to the United Nations of any aggressive action on the part of Cuba.

This support is consistent with the statement made by President López Mateos in February 1964, when he stated that the right place to discuss Cuba was within the United Nations and not within the Organization of American States.

Mexican foreign policy reflects a positive attitude toward the Castro regime. This is based upon the country's formal commitment to support all forms of revolutionary governments. Popular support for the Castro government is quite high; this popular attitude reinforces the present foreign policy position of the Mexican government. Yet, there are signs of growing apprehension in governmental circles that student and peasant unrest is being directed by *fidelistas*. To support this fear is the fact that a member of the Cuban embassy was expelled in 1967 for smuggling arms into Mexico.

Latin America

Among Latin American states, Mexico has one of the best records of cordial relations with its hemispheric counterparts. It is a participant in such joint programs as CEPAL, the Economic and Social Inter-American Council, and the Latin American "common market" (LAFTA). President López Mateos aptly expressed Mexican foreign policy objectives toward Latin America when he stated:

> One of the cardinal points of my government's international policy is the strengthening of the ties that bind us to the other peoples of Latin America. We have certain affinities with them which derive from history as well as geography, plus an awareness of the common problems inherent in our economic and spiritual development.

The country has been actively engaged in formulating the Treaty for the Proscription of Nuclear Arms in Latin America. Mexico became a signatory on February 14, 1967. According to Subsecretary of Foreign Affairs Alfonso García Robles, Mexican support of this treaty has the twin objectives of excluding nuclear arms from Latin America and taking the first step toward the general and complete disarmament of the world. Mexico also supports the economic integration of Latin America and a political confederation in which only Latin American nations can participate. Mexico has become one of the leading proponents of Latin American integration based upon a purely Latin American directorate. While Mexico desires that the United States and Canada assist Latin America toward this end, it contends that it is exclusively up to Latin Americans to determine the nature and scope of their eventual integration. Mexico feels that this cannot be achieved until there is a democratic unity existing in Latin America. President Díaz Ordaz enthusiastically supported the summit meeting of Latin American chiefs of state at Punta del Este in April 1967, and he stated that at this level of decision-making, in concerted action, Latin America would arrive at economic integration in the near future.

Other Relations

Mexico maintains normal diplomatic relations with Western European nations, with the exception of Spain. Mexico is the only Latin American nation which continues to recognize the Spanish republican government-in-exile and maintain no diplomatic contact with the present government in Madrid. There is a large concentration of Spanish republican emigrés in Mexico City where the government-in-exile resides.

Commercial relations with Indonesia, Japan, and India seem to determine the limits of Mexican foreign policy in the Orient. Up until 1962 *charges d' affaires* in New Delhi and Mexico City handled diplomatic relations between India and Mexico.

Diplomatic relations with the Arab bloc and the newly independent African states remain minimal, with the exception of Lebanon. A large number of Lebanese immigrants inhabit Mexico, and this factor accounts for close diplomatic ties.

Overall, foreign relations with other nations display a cordial yet neutral attitude. There have been few occasions since the Mexican Revolution of 1910 where diplomatic ties have been severed. World War II marks the only occasion on which Mexico took a partisan position.

INTERNATIONAL ORGANIZATIONS

Mexico is a member of the United Nations and of all international agencies constituted since the Hague Conference of 1899. It did not apply immediately for membership in the League of Nations, but was a member at the time of the demise of that agency. One reason for the delay in joining was Mexican opposition to Article 21 of the League covenant, which termed the Monroe Doctrine a "regional arrangement" and provided for its internationalization. Mexico expressed reservations against this article on the basis that it was a unilateral declaration and it violated the juridical principles of nonintervention.

As a member of the United Nations and related international agencies, Mexico does not supply any financial assistance or personnel. The United Nations serves as an outlet for Mexican foreign policy statements and is viewed as an embodiment of the principles of international law and cooperation.

Mexico has been one of the most active United Nations members in the area of defining the principles of nonintervention. In an address before the General Assembly, Subsecretary for Foreign Affairs Alfonso García Robles stated that the principle of nonintervention is an incontrovertible and inviolable doctrine guaranteed by the Charter of the United Nations. As a member state, Mexico was at the forefront in pressing the adoption of the declaration concerning the "Inadmissibility of Intervention into the Internal Affairs of States and the Protection of Their Independence and Sovereignty." This was passed by the General Assembly on December 21, 1965, by a unanimous vote. Mexico's consistently reiterated position before the United Nations is that the organization does not have to concern itself with Mexican affairs because Mexico's own development permits it to avoid all international problems. Mexico has taken no position in the United Nations which would compromise its commitment to nonintervention and self-determination. Its foreign policy holds that there can be no international peace if these principles are not observed by all nations.

Regionally, Mexico is a member of the Organization of American States. It has been an active advocate of the "Latinization" of this organization. Again, the country's foreign policy regards this organ as an embodiment of the juridical principles of nonintervention and self-determination. As such, the participation of the United States in this body is viewed by some Mexican foreign policy-makers as inimical to these doctrines. In this view, United States involvement in the cold war impinges upon the development of a truly integrated Latin America. Mexico has vigorously opposed the creation of a permanent OAS military organ.

Some of the reforms which the Mexican Foreign Office has presented for the reorganization of the OAS are as follows: the creation of a General Assembly which meets in regular sessions and constitutes the supreme orgai of the organization; the amplification of the pacific means whereby the Permanent Council could settle disputes between members; the prohibition against any standing military advisory body within the organization; the guarantee of the voluntary nature of accepting or rejecting the actions of the organization; referral to the United Nations of any dispute which cannot be settled; the adoption of new norms concerning economic, social, scientific, educational, and cultural goals of the organization, with the United States abstaining from any of deliberations on these norms and the creation of three independent permanent councils—the Council of the Organization, the Interamerican Economic and Social Council, and the Interamerican Council for Education, Science, and Culture.

The Dominican crisis of 1965 further illustrates Mexican opposition to inter-American collective intervention into the internal affairs of American states. At that time, Mexico affirmed that the sole justification of its military forces has been to defend and protect its own institutions and processes. To expand this to provide personnel for an inter-American military force woud be a violation of the Bogotá Charter, which expressly prohibits the use of force to settle disputes, asserts the doctrine of nonintervention, and guarantees the juridical equality of all states. These provisions constitute the essence of Mexican foreign policy as well.

The country views its participation in international and regional organizations as a reassertion of commitment to the principles of international cooperation and peace. Foreign policy in relation to these bodies indicates a neutralist and isolationist view of what the proper functions of international organizations should be. Within these organs, Mexico asserts a strictly legalistic and juridical approach to the problems of international peace. Self-development by sovereign nations is the best guarantee of the effective operation of international conciliatory agencies. The country proudly points to Benito Juárez, the first Mexican statesman to enunciate the principles of nonintervention and self-determination as the cornerstones of Mexican foreign policy. Mexican participation in international bodies does not extend beyond these doctrines.

DOMESTIC REACTIONS TO FOREIGN RELATIONS

The Marxist Left in Mexico, both within and outside of PRI, is highly fragmented. This has been due to the personal incompatibility between two factions, led by Lázaro Cárdenas and the late Vicente Lombardo Toledano. Also, there is the ideological struggle among groups favorable to Mao Tse-Tung, Castro, Moscow, residual Trotskyites, and revived elements of the non-Marxist Far Left (Bakuninists and the like). Nevertheless, the views of the left still have an impact upon foreign policy makers. Cuba is the one issue upon which these forces agree. On many occasions these groups have united to stage impressive demonstrations in favor of the Castro regime. It appears highly improbable that the Mexican Government, which claims to be revolutionary, would break relations with the only other Latin American government which has implemented vast political and social change through revolution. Such a break would have tremendous internal political impact on the Left, since elements of which already claim that Mexican revolution has been abandoned. On the other hand, when Cárdenas appealed to the students and workers at the time of the 1968 summer Olympics, he urged that they not be misled by foreign agitators who did not have Mexico's interests at heart.

There is also a challenge from the opposition on the Right. The national elections of 1964 indicate some increase in influence of the Right, since the rightist parties outside of PRI polled over 12 percent of the national vote. Municipal elections in 1967 displayed an increase in Rightist polling attraction. This opposition reflects a highly anti-Communistic and anti-Cuban attitude which certainly can affect Mexican foreign policy attitudes toward neutralism in the cold war (see ch. 14, Political Dynamics; ch. 17, Political Values and Attitudes).

At present, Mexican foreign policy is compatible with the domestic policies and represents fairly the dominant attitudes of the people. Mexico's neutralism and policy of peaceful coexistence in international affairs derive their justification from the consequences of 19th-century foreign intervention and the Revolution of 1910. While the government reminds the people that stability within the internal political environment guarantees foreign nonintervention, it must also display a revolutionary fervor to justify its legitimacy.

This ambivalent position has affected many groups, especially in relation to Cuba. Elements of the Roman Catholic hierarchy in Mexico have tacitly entered into the political arena, and expressed an opposition to the Castro regime as a product of athiestic Communism.

POPULAR ATTITUDES

There can be little doubt that the current Mexican foreign policy is supported by the vast majority of concerned Mexicans, and, even, to the extent that it appears relevant to their daily concerns, to both the relatively uninvolved urban and rural poor (see ch. 12, Social Values; ch. 17, Political Values and Attitudes). In point of fact, the Mexican government has seemed sometimes to be forced by anticipation of popular reaction, to take a more uncompromising position than they might on matters related to such key issues as nonintervention.

For this same sort of reason, the position toward the United States is often, per force, ambiguous, since any contemporary Mexican government must balance the historically deeply rooted anti-United States sentiments and the growing and vital economic interchange between the two countries (see ch. 3, Historical Setting; ch. 23, Foreign Economic Relations). The two opposing popular views here are represented by: anti-*gringo* stereotypes on the one hand, and widespread adoption of americanisms, americanized dress and consumer goods on the other.

The Cuban experiment has captured the imaginations of many groups in the Mexican population. Fidel Castro and Ernesto "Che" Guevara have exerted some appeal among the young, who enjoy the emotional appeal of reliving a revolution. Among these groups, the example of United States is often identified with the *status quo* and the older generation. On the other hand, Castro's rise to power has been idealized by some youthful imaginations.

Mexico's attempt to play a leading role in both political and economic cooperation with other Latin American states, and to act as a spokesman toward limiting the influence of the United States and Canada, is generally popular. Similarly, popular Mexican resentment against Spain and Spaniards accompanies and partly counterbalances its persistent haven for the Spanish Republican expatriates.

ORGANIZATION AND OPERATION

Mexican foreign policy is formulated primarily by the President of the Nation. There is a Secretariat of Foreign Affairs headed by a

Secretary and two Subsecretaries appointed by the Chief Executive. While the Constitution provides for civil service appointments to provide government personnel, active membership in the Institutional Revolutionary Party (PRI) is a prerequisite to appointment. Theoretically, the party provides the framework for a total consensus of all sectors and therefore reflects the general will of the people. Since the party has monopolized the machinery of government for a long period of time, there is little possibility, short of an almost inconceivable complete electoral upset for the PRI or a world crisis of overriding proportions, that a significant change will occur in current foreign policy positions.

There is no formally constituted intelligence agency existing within the Mexican Foreign Affairs Secretariat. The military is primarily responsible for such services through military intelligence.

Foreign office personnel are drawn primarily from the professional sector of the PRI. Appointment to the foreign service carries much prestige. Engineers and attorneys constitute the largest group on the upper levels of the foreign ministry, while lower positions are usually filled by minor bureaucrats and professional civil servants. Diplomatic representatives are highly respected by the people, in general, if they occupy a sufficiently prestigious position in the Secretariat (see ch. 17, Political Values and Attitudes).

CHAPTER 16

PUBLIC INFORMATION

As of the middle of 1968 the information-dispensing media were competing vigorously for attention and favor. The radio network, comprised of about 461 broadcasting stations—amplitude modulation and frequency modulation—and about 9 million radio receivers, has the largest audience. There are about 220 daily newspapers with a combined circulation of around 5 million, almost entirely in the larger urban places; but the rate of growth of the daily press has been only slowly overtaking the growth of the population at large. The hundreds of weekly, bi-weekly and monthly papers and magazines making up the periodical press enjoy a larger total influence than the daily press, and in both cases the journalistic standards are high.

The film industry and the theater are outstanding for Latin America; domestic production, which averages 100 films a year and several dozen plays, contributes much less than the foreign production companies which have found Mexico to be a lucrative market. The book industry is one of the largest in Latin America, but high costs and the inadequacies with respect to both education and disposable income characterizing much of the population severely constrain the market, and yield a predominantly small-scale industry which operates in part on government subsidy.

From one station in 1950 television has grown to about 55 stations (including relays) in 1967, with around 2 million receivers to serve. Early in its history, the industry showed a tendency to merger, and in 1968 one system, Telesistema Mexicana, is a dominant factor with two microwave networks covering about 80 percent of the country's population.

The Constitution provides for freedom of expression and of the press, but with certain conditions concerning public morals, public order, and public safety. In practice, a number of governmental agencies regulate, and at times censor, the output of the information media. There are separate provisions for the press, for radio and television, and for films, and the controls are designed primarily to contain any tendencies in the way of incitement to riot or other criminal acts, to deal with slander and libel, to eliminate seditious behavior, and communication of harsh criticism of the government. In addition, these controls exercise some moderating influence on criticisms of the government.

The media are in general privately owned, although the government engages in the publishing business to some extent and owns small portions of the other communication industries. As largely commercial enterprises the media are more concerned with popularity as guidance for the material presented. They feature variety, current events, music, and films. The press, in particular, is considerably less political than in earlier years.

FREEDOM OF EXPRESSION

From independence onward the constitutions have provided for freedom of the press, and this guarantee is preserved in the 1917 constitution. Article 6 declares that the expression of ideas shall not be subject to any judicial or administrative investigation unless there are grounds for believing that it is not consistent with good morals, that it infringes the rights of others, or that it incites to crime or disturbs the public order.

Article 7 specifies that the freedom of writing and publishing on any subject is inviolable. It further declares that no law or authority may establish censorship, require bonds from authors or printers, or restrict the freedom of printing, which shall be limited only by the respect due to private life, morals, and public peace. Article 130 further qualifies the right by requiring that religious publications cannot contain political commentary. The right to assembly is guaranteed, but this does not include a right to deliberative armed meetings.

Since the basic guarantees are conditional, institutions have developed to deal with alleged violations of the stipulated conditions. Suspension of the guarantees in wartime has been invoked; in World War II, for example, a decree law provided for the censorship of mail entering and leaving the country. A state in between peace and war is also distinguished, that of a state of siege where the state's security or well-being is deemed by the President to be sufficiently threatened. Then all rights may be temporarily suspended or limited for the period of the emergency. In peacetime, the institutions provided govern the expression of ideas publicly so that the tests of acceptability established by the government can be applied, informally and formally. The government can exercise substantial influence over the press through a degree of control over the supply of newsprint.

A Code of Ethics has been formulated for the press by the government's Publications' Qualifications Commission (Comisión Calificadora de Publicaciones—CCP) which includes the prohibition of published material downgrading the government. If a violation is detected, the CCP can take the offender to court and have the publication halted. This provision was invoked in 1963 when *Noviembre*, the publication of the Workers and Farmers Party, was declared illegal by the CCP in a Federal Court and publication was halted. Attacks on the government, when they occur, are apt to be indirect and subdued.

There are provisions of the Penal Code as well as the Press Law dealing with prohibitions and punishments. The relevant Penal Code is that for the Federal District and the Territories; since most of the relevant businesses are located or headquartered in the Federal District, the code's practical scope is very wide. Slander, libel, insult, and obscenity, all come within the criminal laws. Violations of these laws can bring up to 2 years in jail plus a heavy fine. A broad category of offense that limits freedom of expression is that of sedition. Sedition involves attacks against the nation, institutions, or public officials and disturbing the nation's peace. It also takes in incitement or provocation to anarchy, robbery, or disobedience. Conviction of any of such offenses can bring heavy jail sentences and fines.

For use of the airwaves, the government gives out revocable 50-year licenses and requires that a government-appointed supervisor approve programs in advance. He can forbid broadcast if he thinks they would be immoral or harmful to the country's economic interests. The law expressly prohibits clandestine publication, requiring always that author's name, printshop, and so on be on each publication. In another field, the government, through the office of Public Education, regulates both the contents and prices of textbooks. The Department of Spectacles has acted in the past to ban the production of plays where public morality was said to be at issue. Films have their own supervisory bodies and require special permits prior to export in order to ensure that the product is worthy of Mexico.

RADIO

The radio broadcasting industry continues to show vitality and growth. In 1961 there were 414 broadcasting stations; in 1964, 495; and, as of mid-1967, 561, including 66 frequency modulation (FM) stations (see table 14). There were about 7,281,000 radio receivers in operation in 1964, 8,240,000 by 1966, and over 9 million as of mid-1968. In 1964 16 percent of these were short-wave. FM saw extremely rapid growth from 16 stations in 1964 to 66 in 1967.

Receivers tend to be highly concentrated—at least one-third are in the greater Mexico City area. Twelve of the FM broadcasting stations and 42 of the AM stations are in the Federal District. Two of the states, Tlaxcala and the territory of Quintana Roo, have only one AM station: 11 of the states have no FM broadcasting station.

Mexican stations serve market areas along the borders—in the southwestern United States, for example—and the country's short-wave transmitters reach elsewhere in the world, especially in Latin America and the Caribbean.

Table 14. Mexican Radio Broadcasting Stations, 1967

States	Number—Frequency Modulation	Number—Amplitude Modulation
Agauscalientes	1	4
Baja California, North	8	26
Baja California, South	1	2
Campeche		5
Coahuila	3	31
Colima		5
Chiapas	1	11
Chihuahua	2	36
Federal District	12	42
Durango	2	8
Guanajuato		22
Guerrero	1	12
Hidalgo	1	3
Jalisco	4	37
Mexico	1	3
Michoacán		25
Morelos		3
Nayarit	1	5
Neuvo León	6	16
Oaxaca	1	9
Puebla	1	12
Querétaro	1	5
Quintana Roo		1
San Luis Potosí		13
Sinaloa	1	22
Sonora	6	36
Tabasco		7
Tamaulipas	8	35
Tlaxcala		1
Veracruz	4	44
Yucatán		9
Zacatecas		5
Total	66	495

Source: Adapted from Foreign Broadcasting Service. Broadcasting Stations of the World. Parts I, II, III and IV. Washington, D.C. GPO, 1967.

Of the mass media, radio probably reaches more of the Mexican population than any other. Its reach has been aided by the large market area open to service by standard band radio stations and the low cost of the battery-powered, small transistor radio sets with which so many homes are equipped.

Together with motion pictures, radio has been a force toward national integration, for it brings to widely separated communities knowledge of the music and other cultural expressions from all the other areas. To some extent it serves to communicate the different values and points of view between urban and rural, thus serving to decrease the contrasts.

Radio broadcasters must operate between the limits imposed by their supervisors on what may be broadcast and those imposed by their advertisers, for radio is primarily a private business. This means that cultural affairs often give way to more popular programs, including music and the reportage of the news. The government operates some stations and these are often used for educational purposes.

Most of the station owners are members of the National Association of Radio Broadcasters (Cámara Nacional de la Industria de la Radiodiffusion) in the Federal District. Many operate as separate business operations, some operate as part of chains, and some are attached to newspapers and other communications businesses.

TELEVISION

Size

The television industry has grown faster than any other media, from one station in 1950 to 55 stations, including relays, in mid-1967. The number of television receivers has grown from 1.3 million in 1964, to 1.8 million in 1966, to about 2 million in 1967. Television receivers are now being manufactured in Mexico. Neither of the national territories has a television broadcasting station, and 10 of the states lack such facilities (see table 15).

Table 15. Mexican Television Stations, 1967

States	Number of stations
Aguascalientes	1
Baja California, North	4
Baja California, South	
Campeche	
Coahuila	3
Colima	1
Chiapas	1
Chihuahua	4
Federal District	9
Durango	1
Guanajuato	4
Guerrero	1
Hidalgo	
Jalisco	3
Mexico	
Michoacán	1
Morelos	
Nayarit	
Nuevo León	4
Oaxaca	
Puebla	1
Querétaro	
Quintana Roo	
San Luis Potosí	
Sinaloa	3
Sonora	4
Tabasco	
Tamaulipas	4
Tlaxcala	
Veracruz	6
Yucatán	1
Zacatecas	
Total	55

Source: Adapted from Foreign Broadcasting Service. *Broadcasting Stations of the World*. Washington, D.C. GPO, 1967.

Mexico has been an enthusiastic leader in the proposed development of an interlinked system extending from Mexico's northern border to the southern tip of Argentina. Realization thus far has been limited to a functioning net in Central America.

A small fraction of the industry's broadcasting is in color. Live color shows have emerged since late 1967 and these were preceded by the introduction, in early 1967, of British and American filmed color TV shows.

Structure

On August 31, 1950, the first of Mexico's television stations went on the air. Onwed by Romulo O'Farrill, it was one of the first stations in Latin America. It soon attracted two competitors. In a short time all three were in financial difficulties, and a merger was consummated to initiate the nucleus of the Mexican national commercial network, Telesistema Mexicana. By 1965, Telesistema Mexicana had two microwave networks covering 80 percent of the country's population. Also by the start of 1965, there were 24 programming stations in operation. By 1962, the Mexican Legion of Decency, a religious body, had been formed to review television productions. In 1964, the Mexican government announced plans to build five educational television stations in the central part of Mexico, over a number of years. The commercial net was devoted primarily to entertainment, and was only slightly involved in educational programming.

There are 28 television producing firms scattered throughout the country, many of them, of course, affiliated with Telesistema Mexicana. The hub of the industry is in Mexico City at Televicentro, the headquarters of Telesistema Mexicana, which supplies videotape and network hookup facilities for the various local stations. As of 1967, there was one noncommercial broadcaster in Mexico City, an educational TV enterprise operated by the National Polytechnic Institute.

There are six other television stations in Mexico City. Channels 3, 7, and 9 are netted with channel 2 on a permanent basis, though they do some programming on their own. Licenses for channels 8 and 13 have been issued for independent operation. Channel 5 has recently become the first Latin American affiliate of the United States' Columbia Broadcasting System (CBS). This will give Mexico City as well as stations in the interior access to CBS programs when desired. Channel 4 had previously become affiliated with the American Broadcasting Company (ABC) and channel 2 with the National Broadcasting Company (NBC).

Viewers in at least 20 of the 29 states and two territories are no served. The network is maintained by relay stations at Paso de Cortéz, Zamorano, Tepatitlán and Guadalajara which serve the states of

México, Morelos, Guerrero, Oaxaca, Hidalgo, Puebla, Veracruz, Tlaxcala Querétaro Guanajuato Michoacán, San Luis Potosí, and Jalisco.

Programming

With its commercial orientation, television programs consist generally of variety, theater, old movies, sports events, and occasional political or cultural events. At Televicentro, the technicians produce about 174 hours of live programs and about the same number of filmed programs per week. Included in this are about 50 half-hour soap opera shows. The microwave relay net completed in 1963 brings many special events to the Mexican audience including the top boxing matches, big league baseball, and other sporting events.

In addition to the domestic market, Mexican television producers have been developing markets for packaged programs in the Dominican Republic, Puerto Rico, Central America, Venezuela, Peru, Colombia, Ecuador, Argentina and Chile. The largest foreign market continues to be the United States. This market is supplied through the Spanish International Broadcasting Company, operating Channel 41 in San Antonio, Texas and Channel 34 in Los Angeles, on UHF. About 70 programs a week go to each station.

Televicentro, Mexico's "Television City" is a vast complex of facilities, equipment, employees, and performers. More than 150 hours of videotape output originates there each week and is sent to local stations throughout the interior and to foreign markets. Ten videotape machines are used, together with 74 cameras, 4 acres of space and over 2,000 employees and performers, directors, and players.

THE PRESS

Newspapers

While films, radio, and television reach many more people than the printed word, newspapers continue to occupy an important place in the overall information system of the country. Daily newspapers have grown in number from 43 in 1900, to 99 in 1947, to 150 in 1957 and on to about 220 in 1968. Circulation of the dailies has reached at least 5 million per day. Mexico City and its environs account for the major portion of the total circulation. Mexico City is one of five cities in Latin America with 20 or more daily newspapers, and there are 38 other cities in Mexico with more than one daily.

Three of the dailies are printed in English, including one, *The News*, which has a substantial circulation, and one is printed in French. The quality of the writing is often excellent, in part because the book industry has not yet developed to the point of being a sufficient outlet for Mexican writers, and newspapers and periodicals have been able to draw upon a large reservoir of talent. In earlier years the press was intensely political, but the political stability since the 1920's and the code of ethics and other restraints have given the press primarily the role of information and entertainment dissemination.

The major dailies have been founded since the Revolution (see table 16). *Excelsior* was founded in 1917, *El Universal* in 1916, *El Nacional* in 1929, *Novedades* in 1935, and *La Prensa* in 1935. An exception is *El Dictamen* of Veracruz which was founded in 1898 and is Mexico's oldest daily newspaper. Felix F. Palavivini (1881–1952), the founder of *El Universal*, is generally regarded as the father of Mexican journalism through the measures he took to upgrade the news coverage and methods.

The newspapers are very competitive and use devices such as lotteries to build circulation. The big city dailies have generally good international news coverage, relying primarily on Associated Press, United Press International, Agence France Presse and Reuters for information. With the exception of *Excelsior*, they do not maintain foreign correspondents. The government provides public information

Table 16. Major Newspapers in Mexico, 1967

Paper	Orientation	Approximate circulation
Federal District:		
Excelsior	Independent-Conservative	159, 000
Ovaciones	Independent	125, 000
Últimas Noticias	Independent	115, 000
La Prensa	Independent	110, 000
Novedades	Independent	98, 000
Diario de la Tarde	Independent	95, 000
El Universal	Independent-Conservative	73, 000
El Nacional	Pro-Government	50, 000
El Día	Independent-Left	40, 000
El Universal Gráfico	Independent	23, 000
The News	English language	20, 000
La Voz de México	Communist	4, 500
States:		
El Occidental Guadalajara	Independent	71, 000
El Norte-Monterrey	Independent-Conservative	65, 000
El Sol de Tampico	Independent	60, 000
Diariode Yucatán-Merida	Independent-Conservative	51, 000
El Sol de Guadalajara	Independent	47, 000
El Porvenir-Monterrey	Independent	42, 000
El Informador-Guadalajara	Independent-Conservative	42, 000
El Sol-Monterrey	Independent-Conservative	42, 000
El Siglo-Torreón	Independent-Conservative	27, 000
El Dictamen-Veracruz	Conservative	23, 000

Source: Adapted from Sachs, Moshe Y., *Worldmark Encyclopedia of the Nations.* New York: Harper & Row, 1967.

bulletins concerning events around the country, and these are an important source of news for the papers and periodicals as well as the news departments of radio and television organizations. Associated Press supplies useful information about events in the provinces, whereas the other news services deal little with that part of the news. The Mexico City papers commonly provide excellent coverage of news in the Federal District, the international and overall national scenes, but spotty coverage of regional affairs.

Almost every provincial town has a daily or weekly newspaper devoted almost exclusively to local news. One chain of 28 provincial papers is the largest in all of Latin America. It is owned by El Sol and has an estimated total circulation of 600,000. Many of the local papers crusade on local issues and often have a profound effect on public opinion. Some of the papers, the weeklies in particular, deal in sensational news.

The most prestigious of the Mexican newspapers is the morning daily *Excelsior*. It publishes an evening edition, *Últimas Noticias de Excelsior*, and several periodicals and has radio station affiliation as well. *Excelsior* is unique in that it is owned by its own key employees; this corporate form having been adopted in 1932. *El Nacional* is owned and operated by the government, and it is read diligently by government employees and others seeking to gain early knowledge of government views and plans. There is an extensive Catholic press, including *Atisbos*, but by law the religious press cannot engage in political commentary.

El Popular, formerly a leading leftist paper headed by the late Vicente Lombardo Toledano, was forced out of business some years ago, because of inability to pay on its credit from the government newsprint monopoly, PIPSA. Most of the 116,000 tons of newsprint used in Mexico is imported and the supply controlled by PIPSA. The Communist *Voz de México* and the leftist *El Día* continue to represent the more left leaning views.

Since financial health is critically dependent on income from other than news copy sales, it is common to find that over one half of the newspapers' space is devoted to advertising. Editorial pages are leading features, and are apt to be two page spreads. Editorializing extends into the news stories as well, for the striving for literary quality is everywhere evident. Except for those papers that specialize in sensationalism, crime and scandal are generally played down rather than exploited for their full news value. Top columnists are much in demand, and many well known foreign columnist are used.

Periodicals

The periodical press has reached formidable proportions in Mexico. There are at least 1,800 periodicals published; close to 500 of them are weeklies, another 250 are fortnightly publications, and well over 800 monthlies, with the balance being quarterlies and journals published at irregular intervals. The major part of these are pointed toward general appeal although there are substantial numbers specialized in religious, technical, scientific, cultural, literary, political, juvenile, sports, and labor matters. There were about 450 periodicals in 1900, about one half of these general information, about 130 political, another 50 or 60 in the literary field and 48 devoted to scientific and technical subjects. By the earliest years of World War II the total number of periodicals had not grown appreciably, but the complexion had already changed markedly, with about the same number devoted to general information, but with very few, about 30, political, a rather small number of literary, and more than 100 scientific and technical.

As for the daily press, the focus of the industry is Mexico City. At least one half of all newspapers and periodicals are published there, with Guadalajara ranking next with about 5 percent, and Veracruz next with about 4 percent. Many observers believe that the periodical press in the aggregate has a larger influence than the newspapers. Almost all magazines date since the Revolution, although *Revista de Revistas*, owned by *Excelsior*, was founded well before the Revolution.

The two leading magazines are *Tiempo and Siempre. Tiempo* (distributed in the United States as the *Hispano Americano*) is modeled after *Time* Magazine, and it tends to be pro-Government and anticlerical; *Siempre* is a left-wing journal. Another weekly published by *Excelsior* is called *Jueves de Excelsior. Sucesos para Todos*, also somewhat leftist, is a popular magazine of the variety type. *Todo* and *Mañana* are popular weeklies with articles of current and historical interest, although they are more political than most Mexican magazines. *Revista de Revistas*, was formerly a literary magazine but like many in that field has changed to cover history and current events.

Visión is a widely read international news magazine, published in New York City. *Hoy* is also a popular news and current affairs magazine as is *El Hogar*. Widely circulated monthlies include *Mapa*, *Social*, *Panorama*, *Mexico This Month*, and *Nuevo Mundo*. The periodicals, with their low copy prices, generally outcompete the book industry, although the growing use of paperbacks is encouraging a resurgence in book buying.

The Spanish edition of the *Readers Digest* is very popular, as is another digest, *Temas*, published in New York. There are a great many comic magazines, including dailies, and their circulation is larger than that of the newspapers. The Catholic Church publishes a comic magazine called *Cruzada*. Comics are generally drawn by Mexican artists.

Revista Industrial is the leading trade journal, but there are at least 12 others. The Banco Nacional de Comercio Exterior publishes a monthly *Comercio Exterior*, circulation about 40,000, which prints very informative reports on the economic situation. *Trimestre Eco-*

nomico is published by the Fondo de Cultura Economica and it is one of the best economic publications in Latin America. There are social science teaching and research centers in Mexico, but their journals have small circulations, although the researchers will sometimes publish in the popular press.

Many Mexican journalists belong to the Inter-American Press Association, which was founded in 1950 to promote Pan American journalism and a free press. Publishers of technical periodicals commonly belong to the Asociación de la Prensa Tecnica de la Republica Mexicana, which is a member of the International Federation of the Periodical Press. The Asociación Mexicana de Periodistas in the Federal District was founded in 1947 to defend freedom of expression and better the conditions for journalists and to upgrade standards, although it is not a trade union. The trade union of journalists is the Sindicato Nacional de Redactores de Prensa, located in the Federal District and founded in 1923. It has over 2000 members and publishes the *Gaceta*. There is also a foreign correspondents' association in Mexico City.

BOOK PUBLISHING

Development

There were a book trade and paper industry before the conquest. Early books were found among the Toltecs, Mixtecs, Zapotecs, Aztecs, Mayas, Totonacs, and Huastecs. Just prior to the conquest the Aztecs were making books in a form comparable to present-day books. After the conquest, however, the native book industry was virtually extinguished.

During the colonial period, books were almost entirely for ecclesiastical (conversion) purposes and for colonial organization. They were printed in almost 40 Indian languages. In the 17th century about 1,845 titles were published, and in the 18th century about 7,757 titles were published. Printing was widely introduced in the 19th century; the first daily newspaper was introduced in 1805. The press at that time was primarily polemical and political, and this phase lasted until late in the 19th century. Books and newspapers were often instruments of intellectual and social struggle, and most books were imported from Spain; all paper came from Spain at that time. The French style was the model in printing and publishing in the 19th century, though later the fashion swung to the British and Scottish styles. With the small local publishing industry, booksellers dealt primarily with foreign works. Foreign publishers became established during the Díaz regime, but few have survived.

Photoengraving was introduced in 1889, and the first color press was installed in 1911. After the Revolution, Mexican governments were greatly interested in books as vehicles for mass education, rural education, and the like. The government regulated the book trade, and it went into the publishing business itself. The government initially published translations of the Greek and Roman classics as part of a program of cultural advancement, but this effort lapsed, and such material did not return until World War II.

Size and Structure

Book publishing activity has grown very rapidly in recent years. In 1955 only about 923 books were produced; by 1964 the number had leaped to 4,661. This growth had been aided greatly by the introduction of paperbacks, for their much lower prices permitted the sales growth which the heretofore small-scale, high-cost, hard-cover book industry had never been able to achieve. Social science books grew in number from 177 in 1955 to 1,072 in 1964. Nearly all categories grew but none so spectacularly as applied and pure science whch alone totaled about 2,200 between them, or almost half the total produced in 1964.

As of mid-1968 there were about 120 publishers in the country. Very few firms are engaged solely in publishing, however, and in most cases the other businesses they carry, book wholesaling and retailing, are financially more important than publishing. The Fondo de Cultura Economica, established by subsidy in 1934, is one of the few firms engaging solely in publishing. Originally devoted to books on economics, the Fondo now carries a more balanced list in the social sciences and humanities. D. E. Herrero and Editorial Patria, both old established publishing and sales firms, have balance in their textbook lines, while César Cicerón, another substantial firm, carries a list balanced in the main toward low-priced popular books.

The Fondo is still partially subsidized, as are all firms in the book industry, since they pay no taxes other than social security taxes for their employees and excess profits taxes. Since the Revolution, adequate copyright laws have been enacted, but a fair portion of the book business is in pirated books, mostly from abroad where royalties do not have to be paid. Foreign firms operating in Mexico are generally in wholesaling, for the others have been almost entirely taken into Mexican control.

Mexico is one of four countries in Latin America which can be said to have important book industries, and Argentina and Mexico are the chief book exporters in the region. Spain still supplies a large part of the imports into the region and into Mexico. The present book industry in Mexico stems largely from the disruption of the Civil War in Spain and from World War II, when traditional sources of supply could not meet Mexican demands: Mexican publishers and sellers moved in to substitute domestic products for foreign ones and experienced large growth rates. Mexico does not levy duties on incoming books, nor does it impose a quota system, although there are import charges on books with elaborate bindings.

Production and Distribution

While production has grown substantially in the past decade, the industry retains a generally small scale. Presses are apt to be rather old, small, and inefficient. The supply of paper continues to be a severe problem, for both quantity and quality have been deficient. Paper is the largest item of production cost, at times reaching three fourths of the total. A factor tending to hold down on the size of printings is that libraries commonly have only meager book-buying budgets, and publishers are unable to count on large sales to libraries in order to establish more economic lot sizes.

Textbook publication is financially the most important part of the industry's output. Here, of course, the government is in competition to some extent. The government also regulates the contents and prices of textbooks. The textbooks for primary and secondary schools are almost entirely by Mexican authors, but for advanced curricula, especially in scientific and technical fields, including law, foreign texts are quite common. In addition to textbooks, the Ministry of Public Education has engaged in other publication efforts, often in philosophical and religious subjects.

Many of the firms are international in character. One of the most important, Espasa Calpe Mexicana, is an important publisher throughout the Spanish speaking world. Editorial Labor of Barcelona, through Editorial Labor Mexicana, supplies many of the scientific and technical works.

Many of the books produced are translations. In earlier times the number has been as high as 25 percent of the total, although in recent years it has been closer to 10 percent, which is a common figure in Latin America generally. English is the language most often translated, followed by French, German, and Italian. The subjects translated span the list from social science to pure science and literature. Expert translators are scarce.

The book trade is less organized than many industries. Sales promotion methods are not well developed nor are distribution methods. Language is a barrier, but the amount and kind of literacy and the economic barrier of book prices relative to incomes are more important.

Publishers and booksellers are usually incorporated. In 1947 a Mexican Book Institute was set up to unify the industry as an incorporated trade organization. The institute, however, has to support government policy on books. Its other activities include promotion, publicizing, and the setting of ethical norms. It is composed of four sections: publishers, wholesalers, large booksellers, and small booksellers. The Mexican Association of Authors is the principal agent of the writers. There is another book industry association, the Mexican

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Book Association (Cámara Mexicana del Libro), which shares the general aims of the Mexican Book Institute (Instituto Mexicano del Libro).

LIBRARIES

As of 1962 there were about 505 libraries. One, the National Library, had 500,000 volumes and belonged legally to the National University. There were 81 other University libraries with aggregate collections totaling 940,000 volumes and another 104 school libraries with 448,000 volumes. Also, 56 special libraries held 918,000 volumes and 263 public libraries had 418,000 volumes. There is a United Nations Educational, Scientific, and Cultural Organization library, a World Health Organization library, two Food and Agriculture Organization libraries, and one for the International Nuclear Energy Agency.

The Columbus Memorial Library was set up under the auspices of the Pan American Union to serve as a clearinghouse for acquiring information and stimulating book exchanges among the American states. It serves as a depository for official and non-official publications of the American nations.

MOTION PICTURES AND THEATER

Around the turn of the century, the Mexican theater was prone to imitate the European theater. From that time forward, however, Mexican themes and interests were established, particularly the Indian heritage and the problems involved in a largely *mestizo* society. The issues in the ongoing social revolution occupied much of the Mexican dramatists' attention, mixed in part with the production of plays originating abroad. La Comedia Mexicana was founded in 1929. Ordinarily dozens of new plays are brought out each year, although the variation from year to year is quite large. Plays are sometimes banned by the government's Department of Spectacles.

The first film in Mexico was in 1897, and the first Mexican production shown was *El Grito de Dolores*, produced in 1910. Four motion pictures were produced in 1932, 32 in 1940 and over 100 in 1950, which has come to be the average annual production. Per capita movie attendance was 4 in 1949 and this increased to 8.5 in 1964. There were 1,579 cinemas in 1964 with 345,700,000 admissions.

In 1944 over 65 percent of all the films shown in Mexico were from the United States, 28 percent were made in Mexico with the balance from other countries. By 1947, Mexican production had increased such that only a little over 50 percent of the movies came from the United States, around 30 percent were produced in Mexico with the remainder from other countries. Foreign films continue to occupy over one half of Mexican film showings, but the Mexican component carries on at around 100 pictures per year.

Mexico has within its borders the largest community of Spanish-speaking people in the world, and has access to the large market potential of the rest of Latin America. It is a country rich in subject matter and in superb landscape. Mexican films are often notable for excellent camera work and many have won festival prizes and critical acclaim throughout the world.

Two-thirds of the cinema projection facilities are for 35 millimeter, with most of the balance for 16 millimeter, and a few 70 millimeter facilities. When commercial exhibition is authorized, it is for all of Mexico. Unless special permission is granted, all shows must be presented for screening no less than 6 days before exhibition. The supervisor must then rule on the film within 24 hours after screening the production. All pictures produced in Mexico must get an export permit to be shipped overseas for commercial purposes. Exports are restricted to films deemed worthy of Mexico. Censorship is maintained by the National Cinematographic Board, which is under the Ministry of the Interior. There is also a National Cinematographic Council composed of government representatives as well as labor. Its function is to monitor all phases of the industry.

The Federal Government owns and operates the Compañía Operadora de Teatros and the Cadena de Oro, by which it controls about 330 of the best movie houses in the country. There is one national film association, Cámara Nacional de la Industria Cinematográfica, located in the Federal District, which covers all aspects of the industry. It has five sections: studio and laboratory owners, production companies, distributors of 35 millimeter films, exhibitors in the Federal District and exhibitors elsewhere in Mexico. There is also an association of producers and distributors of Mexican films, Asociación de Productores y Distribuidores de Peliculas Mexicanas, in the Federal District, and a separate authors union for screen writers, Asociación de Autores Mexicanas de Peliculas. There is a separate organization for film actors, the Asociación Nacional de Actores, with over 4,000 members. Finally, there is a trade union covering film industry workers, the Sindicato de Trabajadores de la Industria Cinematográfica, with 51 sections covering laborers of all kinds.

There are also about 35 production and distribution companies. United States firms with distributorships in Mexico include Twentieth Century Fox, Allied Artists, Universal, Columbia, Metro-Goldwyn-Mayer, Warner Brothers, Paramount, and Disney.

OTHER INFORMATION

Word of mouth continues to be an important vehicle for disseminating information, particularly in the rural areas where the technical media have made lesser inroads. The mails are an important channel of distribution. In 1960, 627,217,000 letters were sent and this had grown to $12,440,000 by 1965. Foreign mail traffic in 1965 amounted to 210,744,000 letters received and 165,256,000 letters sent. Telephones are more widely used. There were 246,426 in 1948, 491,800 in 1960, and 725,072 in 1965. This latter figure made a total of 1.8 telephones per 100 inhabitants, and an average 40.6 conversations per capita were recorded in 1965. The domestic use of telegrams had declined from 39,309,000 in 1960 to 37,419,000 in 1965, with 743,000 telegrams sent abroad in that year.

In 1954 Soviet Bloc stations were transmitting about 21 hours per week in Spanish into Latin America. In 1956 both Communist China and the Soviet Union announced plans to step up their Latin American activities, and radio transmissions grew from 2 percent in the 1950's to 6 percent of their total foreign broadcasts in 1961. In the 1950's a survey of Mexican business executives revealed that of all the foreign radio broadcasts 43 percent preferred the British BBC, 19 percent preferred the Voice of America, and 16 percent preferred United States NBC.

Cuban Radio started in May 1961 and by 1962 was broadcasting more than 130 hours per week to the region. By 1962 about 220 hours per week were being broadcast by the Cubans into Latin America.

Sino-Soviet periodicals circulating in Latin America number over 100, including *Pravda*, *Izvestia*, *New Times*, *China Reconstructs*, and *Trud*. Over 1500 East bloc book titles are available in the region and over 300 East bloc and Communist line newspapers and magazines of which Mexico receives a fair proportion overtly or covertly. There are binational information centers for the United States as well as for many Communist countries in Mexico. These sponsor lectures, films, and cultural events. Local radio programs are often arranged through these centers. There is a Mexican-Russian Institute of Cultural Exchange which maintains a library and reading room as well as other binational activities. In 1954 a Film Exchange agreement was signed between Russia and Mexico, providing for showing each other's films under certain conditions; it has been continued. The United States Information Agency provides books and publishing assistance to libraries and trade groups. The Agency for International Development helps in textbook supply through its Central Book Fund.

CHAPTER 17

POLITICAL VALUES AND ATTITUDES

Emerging after World War II as a maturing revolution, the Mexican political system has captured the loyalties of the vast majority of its people. There are still persisting localisms and even residual regional loyalty patterns, but these are far less noteworthy than the burgeoning sense of nationalism and of pride in Mexico's revolutionary institutions.

Among minority values are nostalgia for an earlier and more hierarchical pattern felt by the minority of political conservatives, and some residual Indianism is found among the rural poor and some of the middle class (see ch. 5, Ethnic Groups and Languages). Values held by opposition groups of the left range from orthodox, Trotskyite, or Maoist Marxism to New Left values of idealistic humanism, rationalism, and syndicalism. Among students and intellectuals of the New Left, a conviction is growing that international armed conflict is an obsolete means of resolving disputes, that mass voicing of demands for change can lead to the solution of outstanding problems. This set of values led to the civil violence in Mexico City just prior to the 1968 Summer Olympic games.

Notwithstanding all of this, the evidence is that most Mexicans identify strongly with their country and its progress, and tend to credit their revolutionary institutions for the realization of these things. There seems to be general acceptance as political goods of the Revolutionary goals of: educational and agrarian reform and development, political freedom from clerical domination, guarantees for labor, and development and exploitation of Mexico's national resources for the common good. Such discord as may exist seems far less a question of the desirability of the values of the ongoing Revolution, but rather of arguments over means, timing, and rate of change.

Freedom from external political intervention, and its reciprocal, a firm noninterventionist policy with respect to other states, remain key elements in the Mexican political value system (see ch. 15, Foreign Relations). Nevertheless, Mexican nationalism is becoming less xenophobic than in many other Latin American countries, even though fears of foreign intervention or economic domination still remain.

POLITICAL VALUES

Political values in Mexico derive from both Hispanic and Indian traditions, each modified by the Revolution. The small upper class of Spanish stock, because of its control of much of the national wealth, has played a major role in shaping past concepts of nationhood and public institutions. Because the ongoing Mexican Revolution has been directed primarily at reducing the ideological and financial power of traditional elite groups, the Mexican upper classes have not been able to maintain dominance of the political value system. It was largely against the Spanish tradition of a politically and economically strong Catholic church that the early revolutionary war of La Reforma was fought (see ch. 3, Historical Setting). The tradition of anticlericalism has continued. The Spanish institution of the *hacienda* (large estate) occasioned land reform as a pillar of revolutionary political values. Yet, equally, it is a modification and evolution of Spanish patrimonial authoritarianism—in the past represented by Church or estate owner—that is the essence of the institutionalized Revolution through the presidentially dominated, one-party democracy that is today the nation's system of government.

Indian traditions account for the continuing current of localism, associated with communal socialism, that is found in Mexico. For the Indian population, concepts such as nationhood and sovereignty have not had much meaning. The Revolution and the current impetus toward modernization have somewhat modified this absence of national political awareness, as channels of political participation have been opened to the Indians. Indian traditions also provide a focus for Mexican nationalism. Pride in the Indian past and in Indian folk heroes has served as a cohesive national force.

The majority of the Mexican people have been able to experience in common the ongoing thrust of their history and derive satisfaction from it. Mexico is one of the few Latin American societies in which nearly all major population segments share this experience. Mexico as a nation emerges as a people bound by a common history and shared symbol of group attachment. Mexicans, however, tend to differentiate between their country as a nation and as a state. The nation is the people; the state is the government.

The state, and the way it is staffed and managed, is often seen as synonymous with government in the authoritarian sense of rule making, rule application, and adjudication. As a concept, the state has at times been a divisive factor among groups and between regions. Mexican nationalism must thus be understood as an allegiance of a people to their sense of nationhood; only secondary does it imply allegiance to the various governments that steward the affairs of the society.

Mexicans, in their formal education system, are taught to respect ir Revolution, its historical antecedents, and the contemporary ms it has assumed. Among the dominant political values held by overwhelming majority of the people, without regard to class, are se of indigenous pride, "Mexico for the Mexicans," the honor of lividual initiative and labor, freedom of speech and association, pect for private property, and political competition. Generally, the pular conception of the proper role of government is that of the lfare state within which private initiative, free exercise of religion, d the authority of the family will be preserved.

The Mexican people have historically indicated a preference for a publican form of government, organized in a federal system (see . 3, Historical Setting). Yet the hierarchical character of the in- genous Meso-American political systems, and the authoritarianism d centrality of the Spanish colonial and many post-Independence gimes, have accustomed them to a stronger executive than in most her constitutional democracies. Still, civilian government was one the principal goals of the Revolution and continues today as a basic litical value.

After more than 100 years of intermittent civil and foreign war and military repression under tyrants, the reaction against militarism Mexico is a strong one. Thus, the military sector of the Institutional evolutionary Party (Partido Revolucionario Institucional—PRI) as abandoned in 1940 as a symbolic diminution of militarism as a ature of Mexican political life. General concepts such as popular vereignty, universal suffrage, and separation of powers are active nsiderations among the educated classes. The masses are, of economic cessity, more likely to be concerned with the practical issues of day- -day survival.

Foreign goals and values are greeted with mixed emotions by the exican people. Values of independence, industry at home, noninter- ntion in the affairs of other nations, and tolerance of dissenting opin- ns are moderately popular. Because Mexico's history has inspired pular resentment and distrust of foreign powers, it is not surprising find Mexicans generally approving their government's disengage- ent from confrontations between major world powers. In a more stract sense, the Mexicans have embraced 18th-century liberal French ealism, while at the same time attempting to fit it to North Ameri- n and British governing institutional structures.

The increasing number of educated youth constitutes another group ith particular political values. It is within this segment of the popu- tion, with its New Left values, that the beginning of political in- bility could most easily arise. The interest of Mexican university dents in practical politics stems in part from the increasing social participation of middle elements in Mexican life, from a conscious seeking of social responsibility, and in part from the Latin tradition of politicized rather than academically detached universities. Democratization of the Mexican university and its establishment as an autonomous academic republic governed by students as well as faculty remains a goal of many Mexican students and professors. The cross talk among the faculties and students of the universities and the activist representatives of the growing urban proletariat reflects the impulse of dissident urban groups toward political change and a new socioeconomic ideology.

More generally, the political values of Mexican society are those of stability, permanence, security of family and home, and of at least a minimal guarantee for the sanctity of public and private, contracts. The desire for security leads toward acceptance of the institutionalization of the ideals and gains of the Revolution, as expressed by the continued tenure of the PRI.

The mechanisms for maintaining the stability of the governmental system, the momentum of the ongoing Revolution, and the introduction of desired changes into the system are uniquely Mexican; they stem from the melding of the three root traditions of the Mexican culture—Hispanic, Indian, and *mestizo* (mixed Spanish and Indian)—and the selective borrowing of elements from the value systems of contemporary Western civilization (see ch. 12, Social Values). Patronage is more overt and considered less reprehensible than in Anglo-Saxon cultures (see ch. 14, Political Dynamics). Hierarchical and authoritarian forms are acceptable if their effect is to further generally accepted goals. In the uniquely Mexican political value system, there remain a number of dichotomies; between the entrepreneurial rights of the individual and communal responsibilities; between piety and conformality and revolutionary change; between the search for individual power or influence and loyalty to a chief or communal group; between the forms of political freedom and the effects of directed action.

NATIONAL PRIDE AND POLITICAL IDENTIFICATION

More than almost any contemporary American society, the Mexicans of today have a bursting pride in their heritage and in their Revolution and its products. *Mexicanismo*, a pride in being uniquely Mexican, is seen by most Mexicans as a process of recent history, beginning with the Revolution of 1910. Their pre-Revolutionary heritage is valued according to its closeness to indigenous values and culture. Mexican heroes and anti-heroes, ranging from Indian to Spanish to *mestizo*, most clearly reflect the sources of national pride and allegiance and indicate the close political identification of the individual with the national body.

ı the minds of Mexicans, the torch of Indianist sentiments has sym-
cally been passed from Cuahutémoc to Benito Juárez to Emiliano
ata to Lázaro Cárdenas—all Indians whose heroic stature has been
ined by ideological and social dependence on indigenous culture
ch. 3, Historical Setting). Of these, perhaps the premier Mexican
onal hero is the full-blooded Zapotec, Benito Juárez, hero of La
orma, and symbol of Indian victory over both *criollos* (creoles)
foreign intervention. More particularly "Indian" and Southern, is
iliano Zapata, leader during the Revolution of the landless Indians
inst the *hacendados* (estate owners). Lázaro Cárdenas is revered
his programs of land redistribution which returned ancestral lands
he Indian *ejidos* (communal landholdings). The principal anti-
o figures are those felt to have betrayed the Indian or revolutionary
itage: Malinche, Indian translator and mistress to Cortés; and
toriano Huerta, counter-revolutionary general and dictator.
mong the Spaniards, Father Miguel Hidalgo, Father Ignacio
ende, and Francisco Madero are heroic figures, the first two asso-
ed with Independence, and the latter with the Revolution. But the
instream of Mexican nationality is epitomized by the *mestizo* Revo-
onary trio, Venustiano Carranza, Pancho Villa, and Álvaro Obre-
. They symbolize the triumph of *mestizaje* (Spanish and Indian
ial and cultural blending), and the more independent tradition of
North. The giant figure of Porfirio Díaz is ambiguous, on the one
d famous for the longest period of stability in Mexican politics, and
the other by the betrayal of his *mestizo* and revolutionary heritage
his fostering of foreign "economic imperialism." Of a somewhat
erent category are such folk heroes as Los Niños Heroes (the boy
oes), the six cadets of the Military Academy at Chapultepec who
nmitted suicide in defense of their country rather than surrender
General Scott's American troops, or the earlier El Pípila, (Juan
é Martínez) hero of Hidalgo's sack of Alhóndiga, a particular
orite of Mexican school children (see ch. 3, Historical Setting).
The official and semi-official holidays indicate an identification by
Mexican people with not only the national body, but with a larger
ity, their religion. Of the political or historical holidays perhaps
most important and popular are: the Independence Day celebra-
n, beginning on the evening of September 15 (although legally not
il September 16), celebrated officially in all territorial and state
itals—in Mexico City, the President of the Republic presides over
public ceremonies; the Day of the Revolution, November 20, which
the anniversary of the Revolution of 1910 against Porfirio Díaz;
l the Cinco de Mayo (May 5—a customary but not legally manda-
y holiday), the anniversary of the initial defeat of the invading
ench at Puebla. The birthday of Juárez, March 21, has also been
oclaimed Day of the Indian Child. Though it is a mandatory holi-

day, it is a less festive occasion, having much the same character as the United States holidays of Washington's and Lincoln's Birthdays. Labor Day, May 1, is also a prescriptive holiday and reflects the Mexican adoption of the international holiday.

There is a designated, but not prescribed, holiday on February 24, in honor of the adoption of the present flag during the War of Independence in 1821. The Mexican tricolor (green, white, and red) bears on the white center stripe the sacred Aztec symbol of an eagle, with a serpent in its mouth, on a cactus. The green symbolizes Independence from Spain and hope; white for purity represented the Catholic religion and now signifies liberty; red, for the union of Spaniards and Americans, symbolizes the people. Even more than some other symbols of burgeoning Mexican nationalism, the flag is widely displayed throughout Mexico on public structures and monuments, both in the ordinary course of events and at times of celebration or of national political events.

Of the religious holidays only Christmas, December 25, is a legally mandatory and therefore a paid one. Other religious holidays, such as the Feast of the Three Kings (Twelfth Night), the pre-Christmas *posadas* (December 16–24—ritual processional recreating Joseph and Mary's seeking lodging before the birth of Christ), Carnival (the 3 days preceding Ash Wednesday), are customary, rather than legal. One of the most important holidays, December 12, is the feast of the Lady of Guadalupe, the Indian avatar of the Virgin Mary, who incorporates also the characteristics of the Aztec fertility goddess, Tonantzin.

Underlying these national holidays which tend to reinforce the feelings of national identity and religious universality, and in some sense opposed to them, are the innumerable local *fiestas* (celebrations), which represent localism and loyalty to the *patria chica* (small country) of the Indian, or the regional loyalties of the remnant Spaniards and of the *mestizos*.

Mexicans in general, however, are bound up in and convinced of the essential success of their political revolution, and of current progress toward and prospects for the success of its concomitant social and economic goals. Out of this has grown the strong sense of pride in Mexico, a pride signally displayed in the course of the 1968 Summer Olympic Games, notwithstanding the abortive attempt of student dissidents to embarrass the government just prior to the Games' commencement.

This identification with emergent "Mexicanness" is also accompanied by the overwhelming adherence of the electorate toward the instrumentalities of the institutionalized Revolution (see ch. 14, Political Dynamics). Minority loyalties are, on the whole, miniscule, whether to the remnants of clerical fascism, to orthodox or schismatic universal Marxism, or to the hyperintellectuality, idealistic humanism, and

ndicalism of the international New Left. The symbols of Mexican
tionalism, whether heroic figures or events such as the Independence,
ı Reforma, or the Revolution are far stronger foci of popular
yalties.

ATTITUDE TOWARD THE GOVERNMENT

There are in Mexico, as in any other contemporary state, disaffected
ıd alienated elements in the polity. These include out of power rem-
ınts of the *ancien regime*, more moderate proponents of the Conserva-
ve position, doctrinaire proponents of alien revolutionary philoso-
ıies, hyper-Indianists, the New Left, and residual localists and
gionalists. These elements are relatively few and uninfluential, not
cause of naiveté on the part of the Mexican electorate or because
f government propaganda, but because of a healthy skepticism among
lexicans. The skepticism is one born out of: the dualism of the
ispanic colonial regime; the glittering but unrealistic promises of
ıe innumerable Plans of the 19th and early 20th centuries; the
current set-backs to the revolutionary process. Skepticism notwith-
anding, the perceived historical thrust, as seen by the Mexican
eople, has clearly been toward stability, progress, and the increasing
ıvolvement of the people in the state and the national society.

Thus the electorate, on the whole, is pleased with and proud of their
ıstitutionalized Revolution. Political relevancy is seen in pragmatic
ıther than ideological or polemic terms. The ongoing economic revo-
ıtion has done much to foster this acceptance of the existing political
ırms. The ruling coalition has exhibited remarkable flexibility in
ljusting to imbalances. The Centrist Adolfo Ruíz Cortines (1952–
958) was replaced by the moderately Leftist Adolfo López Mateos
1958–1964), and he in turn by the moderately Conservative Gustavo
íaz Ordaz (1964–). There is a saying among the *cognoscenti* of
ıe Capital that no matter what the pre-election position of a PRI
residential candidate—in office he always becomes a Centrist. This
exibility, given both the hopes of modern Mexicans and their realism
nd pragmatism, continues to command the loyalty of the active frac-
on of the people.

Mexicans generally are confident that their national destiny is mani-
est; that it will be one of material well being and social justice for
ll. Because of this confidence, most are willing to tolerate perceived
nperfections in government and, as such occasions occur, to accept
oically the inability of any given regime to deliver all at once the
reat promises of the Revolution.

Many Mexicans, as in most countries, do not hold the affection for
ıeir government that they so often display toward the nation. It is
ossible to criticize the government of the moment—whether local,
egional, or national—with relative freedom, but it is inadvisable to

attack the nation. Both because governmental service is seen in Mexico as a major route of socioeconomic mobility, and because of the Hispanic tradition of *empleomanía* (tying one's life to government employment), the people have come to expect and tolerate some waste and inefficiency in the administration of the various programs and to tolerate as well patronage and graft. Generally, however, the people seem to be pleased with what their government is trying to do, even though they may remain cynical about particular individuals in government at a given moment.

To those living in rural areas, especially in Indian areas, the central government tends to remain something far away and abstract. This is likely to be a function not only of distance from the Federal District but of the relative access an individual has to governmental organs. Among the lower classes today there are many who have adopted a fatalistic attitude toward their government, believing that their access to it, either legally or politically, is severely limited.

When compared with other Latin American peoples, Mexicans show less tendency to join long-term radical political movements that seek to redress their grievances by way of violence. Although there is evidence today that some political alienation exists in Mexico, this seems due primarily to the world-wide phenomenon of increasing frustrations of a population with half of its members in a youthful category.

SECTION III. ECONOMIC

CHAPTER 18

CHARACTER AND STRUCTURE OF THE ECONOMY

Mexico's present phase of economic development began with World
Var II but the necessary social and political preconditions of the
rocess had been established by the land reforms of the 1930's. These
iquidated the political power of the *hacendado* class, who had stood
gainst industrial protectionism as contrary to their own economic in-
erests. They also removed a perennial source of social and political
nrest by converting hundreds of thousands of formerly landless agri-
ultural workers into small holders with a stake in the existing order.

With the advent of World War II began a boom period for Mexican
ndustry. The world's leading industrial nations were either completely
ut off by war from the Mexican market or needed their industrial
apacity to supply their own military requirements. As a result Mexi-
an plants operated at capacity for the first time in their history and
ome Mexican manufactures, such as textiles, even gained a consider-
ble export market. Exports of mineral raw materials were much
ncreased and, owing to inability of their producers to spend the
roceeds in the United States market, large dollar balances were ac-
umulated. Industrial scarcities, and Mexican industrial prosperty,
ontinued through the war and immediate post-war years. These years
vere also a period of growing political influence for the industrial
ommunity and, when foreign manufactures began to flow into the
Iexican market again, Mexican industry, no longer faced by the
pposition of a vocal and politically powerful landed interest, was
ble to develop itself behind a sheltering structure of import duties
nd quotas and continue increasing its sales in the domestic market.

For Mexico, the last 20 years have been predominantly a period of
ndustrialization. During this period, few developing countries have
hown comparably vigorous or sustained growth, and even fewer have
een equally successful in economic diversification. In this process,
lthough Mexico remains basically an enterprise economy, the govern-
nent has played a vital role in economic management.

In the course of recent development, however, certain problems have persisted and others have emerged. Manufactures have been heavily subsidized at the expense of the consumer by means of protective tariffs and other import restrictions, and the government is now seriously concerned with the need to reduce levels of protection in the interest of industrial efficiency. Population growth continues to accelerate, seriously complicating efforts to raise educational standards and bring about a more equal distribution of the benefits of economic progress. Although the growth of agriculture has been vigorous, a marked dichotomy characterized the agricultural sector, where progress has been limited mainly to commercial cultivation carried on by modern methods on irrigated lands; the overwhelming majority of the rural population continues to constitute a depressed area of the economy, dependent on marginal lands and less productive methods. It is on the eventual solution to such problems as these that the long run future of the Mexican economy appears to depend.

RESOURCES AND TECHNOLOGY

With 759,530 square miles of territory and a population estimated at 47,600,000 for 1968, Mexico had only about 62 inhabitants per square mile. Most of the country, however, is arid, semi-arid, or mountainous and only 15 percent of the land is considered cultivable. Yet, under irrigation, many areas are highly productive and the agricultural progress of recent years has been largely attributable to the magnitude of the national irrigation program, which is still going forward. The country has extensive stands of pine, now covered by a conservation program, as well as tropical mixed hardwood forests. The potential of Mexico's marine fisheries is considerable; although shrimp is a leading export, inadequate attention has been paid to the domestic market.

The nation's industrial resources are substantial and well diversified. It is particularly well endowed with nonferrous metals and, in 1967, it was the world's leading producer of silver, fourth in lead, and sixth in zinc. It is also an important producer of copper and is self-sufficient in a number of other metallic minerals, including manganese, molybdenum, and tungsten. It is the world's third producer of sulfur and has a diversity of other non-metallic minerals including extensive deposits of good kaolins. Iron ore is sufficient for growing domestic requirements for many decades to come but coals are generally not of high quality and only in the north is coking coal found in conjunction with iron deposits. Known petroleum and natural gas reserves are sufficient to cover the present rate of consumption for around a quarter of a century. Over half the nation's hydroelectric potential still awaits development.

Mexican infrastructure in electric power, communications, and in ail and highway transport are generally adequate for the development of the nation's resources. Only in the southeast have persisting eficiencies in the power and transportation network constituted a erious obstacle to development, and these shortcomings are now in process of being remedied.

Although Mexico is still generally without an adequate capability or technological innovation, it has in the past quarter of a century proved its ability to employ imported technology successfully. The igher education provided by the National University and the Naional Polytechnic Institute is perhaps the best in Latin America and many students receive advanced training abroad. The most serious eficiency in technological skills results from the small number of persons who acquire secondary and vocational education. In 1966, out of a potential primary school population of 10,850,000, only 70 percent would receive any formal education at all, 16 percent would finish the sixth grade, and 3 percent would complete he two 3-year stages of the secondary cycle in either vocational or college preparatory work. As a result of the narrow base of secondary education in general and vocational education in particular, plus he general lack of systematic apprentice training programs, Mexico suffers from a serious deficit in intermediate skills. This necessitates excessive supervision and makes undue demands on the time of professional and engineering personnel (see ch. 9, Education).

Among the results of this deficiency in intermediate skills is the difficulty which is experienced in maintaining adequate standards of quality control in industry. This problem is aggravated by the nation's ack of any antecedent tradition of precision handicrafts. Many workers in what was only recently a predominantly agricultural society have little awareness of the need for precision in the timing or execuion of their tasks—a condition which is only gradually being corrected as the country acquires industrial experience.

Generally speaking, handicraft production has given away rapidly before factory production. Except in the case of a few traditional tems, the general preference of the domestic market is for factory-produced goods and today handicrafts account for a small and diminishing proportion of the gross domestic product. In agriculture, the technical dualism of the economy is a more serious matter. Here, the number of workers employed by traditional agriculture remains high, while their share of the total agricultural product steadily diminishes. Increases in productivity have been largely restricted to advanced commerical agriculture carried out on a limited area of irrigated lands.

In the accelerating process of development which has been going c
in Mexico since World War II, important structural changes hav
occurred. Thus, primary activities engaged 58.3 percent of the labo
force in 1950 and only 50.2 percent in 1967. During the same perio
the share of these activities in the gross domestic product (GDP) fe
from 19.6 to 15.8 percent (see table 17).

The relative position of extractive industry changed little betwee
1950 and 1967, its proportion of the work force rising from 1.2 to 1
percent, and of the GDP from 4.5 to 4.7 percent. Within the secto
however, the relative importance of metallic minerals diminishe
while sulfur and common salt emerged as items of major importanc

From 1950 to 1967, manufacturing increased its share of the wor
force from 11.8 to 15.7 percent and of the GDP from 18.3 to 26.5 pe
cent. In the same period—under the impulse provided by populatio
growth, migration to the cities, and industrial development—constru
tion grew in relative importance at an even higher rate than manu
facturing, raising its share of the labor force from 2.7 to 4.6 percen
and more than doubling its share of the GDP from 1.8 to 3.9 percen

Tertiary activities—commerce and finance, personal and public serv
ices—increased their share of the labor force from 26.0 percent in 195
to 28.2 percent in 1967, while their claim on the GDP fell from 55.
to 49.1 percent. Both changes reflect mainly trends in the commercia
sector. During 1950 to 1967 period, the proportion of the work forc
employed in commerce and finance rose from 8.3 to 10.5 percent, whil
the share of these activities in the GDP declined from 32.4 to 26.

Table 17. Shares of Economic Sectors in the Mexican Gross Domestic Produc
1950–1967

	Percent of gross domestic produ	
	1950	1967
Agriculture, stock-raising, forestry and fisheries	19. 6	15.
Extractive industry	4. 5	4.
Manufacturing	18. 3	26.
Construction	1. 8	3.
Electric power	0. 5	1.
Transport and communications	4. 3	4.
Commerce and finance	32. 4	26.
Miscellaneous services	18. 6	17.
Total	100. 0	100.

Source: Adapted from Raúl Ortiz Mena, et al., *El Desarrolo Económico de Méxi*
y su Capacidad de Absorber Capital del Exterior, Nacional Financiera, S.A
Mexico, D.F., 1953, pp. 14 ff.; *El Mercado de Valores*, Dec. 2, 1968, p. 77

ent. The latter trend represented readjustment to pre-war margins he inflated commercial profits which had prevailed during the war immediate post-war years.

he figures given above include allowances for the nonmonetized duct of the rural economy. In purely economic terms, this is small. hough a high proportion of the rural population still depends on sistence farming supplemented by some production for market and seasonal employment in commercial agriculture, subsistence culti- ion is carried on mainly by primitive methods on marginal or sub- rginal lands. Although its contribution to the GDP is relatively ll, its social and political importance is nevertheless considerable. rticularly since the land reforms of the 1930's, it has provided a ioeconomic base for a large number of otherwise rootless agricul- al workers who had been developing into a politically explosive al proletariat. In these terms, the persistence of subsistence agri- ture, unproductive as it is, tends to ease the process of transition to economy of urban industry and mechanized commercial agriculture.

ot all of the important structural changes in the Mexican economy ce World War II are apparent in published figures on sectoral prod- and employment. Thus, these figures show the growing relative portance of manufactures, but not their changing composition. enty years ago, the manufacture of durables was still largely re- cted to final stages in the assembly of imported components. Since n, dependence on imported parts and semi-finished goods has been adily reduced and Mexico has even begun to export significant ntities of simple and labor-intensive capital goods made entirely m domestic raw materials, such as boilers, heat exchangers, drill s, and freight cars (see ch. 20, Industry).

he average annual rate of increase in manufactured product dur- the past two decades has been around 8 percent. This growth has n achieved by a deliberate policy of promoting manufactures at expense of the economy at large by raising the prices of manu- tured goods to the consumer through the imposition of protective iffs and other import restrictions. The impact of this policy on the icultural sector has been somewhat mitigated by the fact that many te sponsored industrial projects (the production of fertilizers and ticides) have been developed in support of agriculture. Also, more ently, the government has been pursuing an increasingly selective icy with respect to protection. Its intent is to bring about a gradual uction in the level of import duties on manufactures as a means to npel the introduction of more efficient methods of production.

nother important trend is toward greater economic diversification. is is apparent in the composition of international trade. Before rld War II most of Mexico's imports were manufactured consumer ds. These are now largely produced in Mexico, and imports consist mainly of capital and other producer goods. Export statistics also reflect the diversification process. In 1950 only seven commodities accounted for 70 percent of Mexico's exports; by 1967, it took more than a score to make up this proportion. The qualitative composition of the export list is also increasingly heterogeneous. In 1950, four of the seven major exports were metallic minerals. By 1967, such miscellaneous items as common salt, synthetic hormones, and improved millet seed were significant producers of foreign exchange. The diversification process described has of course greatly reduced the vulnerability of the economy to technological substitution and other factors influencing demand for the nation's products in the world market.

Another significant structural change has been taking place within the agricultural sector. During the last quarter of a century large expenditures on irrigation have provided the basis for an advanced commercial agriculture, mechanized, highly productive, and employing relatively little labor. This has grown up alongside a traditional agriculture carried out mainly on unirrigated, semi-arid, and often submarginal lands. The latter still occupies most of the rural population, but produces a minor and steadily diminishing share of the agricultural product. As a result of this dichotomy, technological progress in agriculture has brought about little improvement in the economic situation of most of the rural population (see ch. 19, Agriculture).

Agriculture has, nonetheless, played a vital role in Mexico's rapid development over the past two decades. The export of agricultural products is now the source of almost half of the nation's foreign exchange, vitally needed to finance the importation of capital goods. The growth of the argicultural product between 1950 and 1967 exceeded that of population by almost 35 percent. In the same period, the nation was able to achieve not only self-sufficiency but also a strong export position in basic foodgrains.

Between 1950 and 1967, the average annual rate of increase in the gross domestic product calculated at constant (1950) prices was 6.2 percent. This, taken in conjunction with the accompanying process of economic diversification, was one of the outstanding performances among the world's developing countries. The overall growth rate also showed considerable stability from year to year, falling below the per capita rate of population increase only once in the 17-year period (see table 18). The average annual rate of increase in the per capita GDP at constant prices was approximately 2.7 percent, between 1950 and 1967 and attaining a per capita figure of 5,971 pesos (almost US$480) in the latter year. In the Mexican economy, the importance of the external sector has been smaller than is often believed, and is declining. Between 1963 and 1967, the proportion of exports to GDP declined from 11.1 percent to 9.1 percent, while that of imports fell from 12.5 to 11.7 percent.

Table 18. Mexican Gross National Product, 1950–1967

Year	At current prices (in millions of pesos)	At 1950 prices (in millions of pesos)	Annual increase at 1950 prices (percent)
50	40, 577	40, 577	----------
51	52, 311	43, 621	7. 5
52	58, 643	45, 366	4. 0
53	58, 437	45, 618	0. 6
54	71, 540	50, 391	10. 5
55	87, 349	54, 767	8. 9
56	99, 323	58, 214	6. 3
57	114, 225	62, 708	7. 7
58	127, 152	66, 177	5. 5
59	136, 200	68, 119	2. 9
60	154, 137	73, 482	7. 9
61	163, 757	76, 038	3. 5
62	177, 533	79, 691	4. 8
63	192, 200	84, 700	6. 3
64	224, 600	93, 200	10. 0
65	242, 700	98, 200	5. 4
66	272, 100	105, 600	7. 5
67	301, 400	112, 400	6. 4

urce: Adapted from Banco de México, S.A., *Informe Anual, 1967*, p. 51.

Mexico's prospects for future economic progress are favored by the avy outlays that have been and continue to be made on economic frastructure. The country is already served by comprehensive trunk il and highway networks. Great improvements in rail service have ken place in recent years, and the highway network is now being tended by the construction of several thousand miles of feeder and rm-to-market roads. Around 9.4 million acres of land had been ought under irrigation by the end if 1967, representing an increase 23.4 percent in the preceding 10 years, and irrigation is being conntly extended and improved. From the end of 1960 to February 69, electric generating capacity was increased from 3,021 megawatts 6,744 megawatts, almost 125 percent.

One structural obstacle to long run development is that the pattern income distribution tends to exclude a large part of the population om the market for manufactured goods, often necessitating indusial operations at below optimum plant size and at high unit cost. lthough the Latin American Free Trade Area is beginning to provide me relief from the too narrow confines of the domestic market, the tential is limited because Latin American economies tend to be mpetitive rather than complementary. Continuance of the present gh rate of population increase may complicate the problem of bringg more Mexicans within the scope of the market and may hinder forts to raise the general level of education high enough to meet the quirements of a developing economy.

The National Staples Company (Compañía Nacional de Subsistencias Populares—CONASUPO) has intervened in the distribution of basic foodstuffs and other important cost-of-living items in order to protect the living standard of lower income groups. Average per capita caloric and protein intake have exceeded recognized minimum standards for the region for a number of years past. There are relatively large expenditures on public education and an extremely comprehensive social security and medical aid program (which now covers over 20 percent of the population and is being rapidly extended).

Although population continues to grow at an accelerated rate (now 3.5 percent annually), Mexico has, during the past 17 years, been able to maintain an average annual per capita rates of increase of 2.7 percent in the GDP and 1.7 percent in agricultural product. There is, however, concern among those responsible for economic planning over the possibility that a continuation of the present rate of population increase may not only impede future economic growth but also obstruct efforts to achieve a more equal distribution of its benefits.

The heavy concentration of income in urban centers, especially in the Federal District, has also been a source of concern to socioeconomic planners and during the past decade there has been much discussion of the need for the geographic decentralization of Mexico's industrial growth. So far, accomplishment in this direction has been limited for the most part to the industrialization which has been taking place in the Bajio, immediately northwest of the Capital. However, present projects for the industrialization of the southeast, based on the oil, sulfur, hydroelectric, and agricultural potential of the Isthmus of Tehuantepec and the Grijalva-Usumacinta basin, show much promise.

While Mexico has not succeeded in maintaining price stability, it has escaped the worst excesses of hyperinflation. The last devaluation of the peso (which is officially tied to the U.S. dollar at a rate of 12.5 to 1) took place on April 17, 1954. Between 1954 and 1967, the Banco de México's general wholesale price index increased 57.2 percent, while its cost-of-living index rose 77.2 percent—the latter equivalent to an average annual increase of slightly over 4.5 percent (see table 19). The effect of inflation on the living standards of the lowest income groups has been mitigated by biennial increases in the minimum wage schedules and, although complete data are not available, wages have in general kept pace with productivity. There have, however, been considerable inequalities in this process, reflecting levels of sectoral activity and demand for labor on the one hand, and union bargaining power on the other.

Although unemployment has not been a serious problem, underemployment has particularly in subsistence and semi-subsistence agriculture, where it is only partly relieved by the seasonal employment

Table 19. Mexico City Price Indices, 1950–1967
(1954 = 100)

	General wholesale price index [1]	Cost of living index [2]
0	72. 5	
1	89. 9	90. 9
2	93. 2	99. 5
3	91. 4	93. 2
4	100. 0	100. 0
5	113. 6	118. 0
6	118. 9	122. 9
7	124. 0	129. 3
8	129. 5	142. 9
9	131. 0	147. 8
0	137. 5	151. 7
1	138. 8	157. 1
2	141. 3	157. 2
3	142. 1	156. 6
4	148. 1	163. 8
5	150. 9	166. 5
6	152. 8	172. 8
7	157. 2	177. 2

10 items, [2] 16 items.

irce: Adapted from Banco de México, *Informe Anual, 1967*, pp. 58 ff.

ovided by commercial agriculture. There is also concern for the parent incapacity of urban industry, commerce, and services to onomically absorb labor as fast as it is being displaced by migran from the depressed sectors of the rural economy. This has tended result in the transfer of considerable rural underemployment to the ies and it is feared that as time goes on it may result in urban mass employment.

As regards the traditionalism which frequently obstructs economic ange in developing countries, Mexico's situation is particularly vorable. The process of racial and cultural fusion began early, and exicans have achieved a remarkably clear and universal sense of tional identity. The separation of Church and state began a century o under Benito Juárez and today the secularization of politics, economics and education is virtually complete. The turbulence of Mexican story during the past century, reflecting not merely the ambitions of few leaders but also the social, economic and political aspirations of majority, has swept away traditional elements which, in many her Latin American countries, still constitute serious obstacles to onomic progress. Today paternalism and other nonmonetary bases r economic relationships play a small and diminishing role in Mexin life.

BANKING, CREDIT, AND CAPITAL FORMATION

Surpassing planning goals, Mexico succeeded in increasing the proportion on GNP going to gross fixed investment from 14.6 percent in 1963 to 17.6 percent in 1967. The share of government (federal, state, and municipal) in total gross fixed investment was 45.6 percent in 1967, close to the average of 46.2 percent maintained during the five-year period 1963–1967.

In the quarter of a century from 1942 through 1966, foreign capital had financed 10.7 percent of Mexican gross fixed investment but, in 1967, net long term capital inflows (excluding reinvested profits) accounted for only 7.4 percent of gross fixed investment.

Mexico has a strong banking system, regulated by the federal government through the Banco de México, central bank and sole bank of issue, which is empowered to establish legal rates of interest on deposits, and to set reserve ratios and rediscount rates. The regulatory powers of the government have often been effectively employed to influence the volume and direction of investment, particularly to limit certain types of commercial credit and restrain investment in luxury housing, diverting funds into industry and agriculture.

In 1968 the private sector of the banking system included 105 commercial banks with assets totalling 29.7 billion pesos and 96 *financieras* (development banks) with assets of 46 billions. The latter have played a vital role in the promotion, planning and financing, of Mexican industry during the past three decades. Miscellaneous private credit institutions, including savings banks, trust companies, and mortgage banks, had assets of 20 billion pesos.

The role of government institutions in the provision of intermediate and long term credit for development is also a vital one. Apart from the central bank, there were 29 federal credit institutions in 1968; their assets totaled 50.2 billion pesos. Among these, the most important is the Nacional Financiera, which has for over a quarter of a century played a major part in the long term financing of the economic infrastructure and basic industry.

At the end of 1967, the banking system as a whole had outstanding credits amounting to 121.3 billion pesos. Of this total, 24.8 percent went to the public sector and 75.2 percent to private enterprise. Of credit to the private sector, 60.8 percent went to industry, 15.4 percent to agriculture and stock raising, 1.1 percent to mining, and 22.7 percent to commerce (see table 20).

RELATIONSHIP OF PRIVATE AND PUBLIC SECTORS

The Mexican economy today operates essentially in accordance with the principles of free enterprise and private property in the means of production, but the operation of private initiative is constrained

Table 20. Credit Extended by the Mexican Banking System, 1963–1967
(in billions of pesos)

	To private enterprise					To federal government	Grand total
	Industry	Agriculture	Mining	Commerce	Total		
63.....	32.8	8.2	0.2	11.0	52.3	9.0	61.3
64.....	38.7	9.3	0.2	13.3	61.5	12.9	74.4
65.....	42.0	10.6	0.2	14.0	66.9	20.5	87.4
66.....	46.6	12.7	0.5	17.4	77.2	27.4	104.6
67.....	55.5	14.0	1.0	20.7	91.2	30.1	121.3

urce: Adapted from Banco de México, S.A., *Informe Anual, 1967.*

ithin certain fairly well defined Constitutional and legal limits. Thus, ie Constitution of 1917, as amended, establishes certain bounds to ie extent of private property in agricultural lands and to private ghts in the use of non-renewable natural resources. It sets up govern-ent monopolies for the exploitation of the nation's petroleum and itural gas deposits and for the production of electric power in public rvice. It also extends certain guaranties to labor, including the right collective bargaining, a minimum wage, and limited participation the profits of enterprise.

The government, on the other hand, has assumed broad responsibili-es for the provision of economic infrastructure in transport and ommunications, in power and irrigation, and in general wherever the nortization period is too long, the rate of return too low, or the sk too great to attract private capital.

The direct participation of the federal government in the Mexican onomy is accomplished mainly by means of government corporations id other semi-autonomous agencies, including Petróleos Mexicanos the government petroleum monopoly), the Comisión Federal de lectricidad (the federal electric commission), the National Finan-era (the government development bank), Ferrocarriles Nacionales e México (and other national railways), and CONASUPO (the na-onal agricultural marketing organization).

Indirectly, the government has acted to influence the level and irection of private investment by means of concessions for the ex-loitation of mineral rights, permits for the importation of capital and her producer goods, exclusion of imports competitive with domestic roducts. Under the federal legislation of 1954, incentives (including emptions from income taxes and customs duties) are provided for idustrial and other enterprises considered to be in the public interest, nd similar legislation has been passed by all the states and territories.

In effect, Mexico is a mixed economy, in which the role of private iterprise is still intact, but in which the government plays an extremely active role of economic management and stands ready to inte vene directly in any area of the economy where private incentives a deemed to be deficient.

GOVERNMENT POLICIES, PLANS, AND PRIORITIES

Although the federal government has, for the past quarter of century, acted with increasing effectiveness to determine the rate an direction of economic growth, systematic programming was for som years limited to regional and sectoral development. The first ste toward formal national planning have only been taken during the la decade. In 1961, an Inter-Ministerial Commission, composed of repr sentatives of the Ministry of the Presidency and the Ministry Finance and Public Credit, was given the responsibility for formula ing short and long-term development plans for the various regions an for the country as a whole. Goals for growth in the gross nation product (GNP) were initially set at 5 percent annually for the ear and 6 percent for the latter years of the 1960's—rates based on th requirements for attainment of the goals established by the Chart of Punta del Este for per capita economic growth. Early in 1962, th Commission prepared a 3-year Immediate Action Plan for 1962–196 This plan, modified to cover the years 1963–1965, was reviewed an evaluated by a committee of the Panel of Nine, in accordance with th Charter of Punta del Este, and by the World Bank.

The 1963–1965 plan projected an increase of some 30 percent in gro investment as compared with the 1960–1962 level, and was intended raise gross investment as a proportion of GNP from 14 to 16 percen Most of the increase in investment under this interm plan was expect to proceed from the public sector—mainly in the form of capital ou lays on transportation, irrigation, and social services. In the priva sector, high priorities were given to investment in pharmaceutical petrochemicals, iron and steel, machinery, and the modernization the textile industry. From the outset, because of the nation's general high rate of economic expansion in the preceding decade, the prin concern of the planners was not so much with maximizing the rate with insuring an orderly and balanced growth.

During 1963 the investment objectives of the plan were substantial achieved and in 1964 they were exceeded by around 3.1 billion pes or over 20 percent. In the former year, the GNP calculated at consta (1950) prices rose 6.3 percent, and in the latter year by 10.0 percen In the following year public investments fell below plan targets as result of the government's decision to limit its capital expenditures going projects. However, because of the large outlays of the precedi year, average investments for the 1963–1965 period were sufficient fulfill plan goals and, in 1965, GNP at constant prices again rose 5.4 percent.

Prior to the first 5-year plan, budgetary controls were tightened. he Budgetary Act for 1965 initiated a system whereby the finances f all government corporations and other semi-autonomous agencies f the government were brought under direct federal control. This ystem, which went into operation on January 1, 1965, covered the ctivities of 19 agencies, including the national petroleum monopoly, e railways, and the national agricultural marketing organization. lthough the finances of these agencies had previously been under he nominal supervision of the government, this control had not been omplete; the new legislation implemented it and made it fully effective for the first time.

In the same year, the Executive requested the various ministries and utonomous agencies of the government to prepare and submit their nvestment plans for 1966–1970. These were analyzed by the Inter-inisterial Commission, which did not complete the national public nvestment plan for the period until 1966. Projected was an annual ate of increase in GNP of between 6 and 6.5 percent, again predicated n the goals established at Punta del Este. Among the announced obectives of the plan were the maintenance of monetary stability and alanced growth, more equality in income distribution, and the attainent of higher levels in education, housing, health, security and welare. Special efforts were to be directed toward the promotion of omestic savings and the expansion of the domestic market.

In terms of economic growth, top priority was given to industrial nd agricultural investments aimed at increasing productivity. The otal investment outlay projected for the period was 275 billion pesos t 1965 prices, of which 95 billion, or 35 percent, was to be furnished y the public sector, while private investment was expected to provide 80 billion. Foreign sources were counted on for less than 10 percent f the total capital requirements of the plan. This is consistent with he current policy of the Mexican government on foreign investment, hich treats external financing as complementary to domestic capital ources, to be employed exclusively for self-liquidating projects in ields where there is a clear shortage of domestic capital.

Project execution, as a rule fairly efficient, has been hampered or elayed by deficiencies of inter-ministerial or inter-agency coordination. Partly as a consequence of this, only 74 percent of authorized apital expenditures by the public sector were carried out in 1965 and, n the subsequent year, this proportion fell to 71 percent. The effectiveess of planning was further impaired by the practice of carrying over nused balances of authorized public investment from one fiscal year to he next. In February 1967, however, all pending authorizations for 966 were cancelled, and a system was set up to insure tighter control ver the timing of budgetary execution. In the same year, there was n effort to gain more lead-time in planning for the subsequent year, in order to avoid the interruptions in public works which had often taken place between fiscal periods. By mid-1968, not only were investments being programmed for the subsequent year, but planning was under way for 1971–1975. Also in 1968, the government launched a national photogrammetric survey and resource inventory, to provide a better basis for long-range economic planning.

The capital budget for the public sector in 1968 amounted to 25.5 billion pesos—38.4 percent for industries under public control, 24.6 percent for social infrastructure, 23.5 percent for transport and communications, 12 percent for agriculture and fisheries, and 1.5 percent for administration and defense. While past investments in infrastructure have been focused mainly on centers of 2,500 inhabitants and over, the emphasis is now being shifted to the requirements of villages in the 500 to 2,500 range, which contain around one-fourth of the Mexican population. Up to the present time investment policy has been characterized by a primary emphasis on the development of economic infrastructure—in transport and communications, electric power, and irrigation—while needed outlays on many types of social infrastructure are still being deferred.

Mexico has faced little difficulty in maintaining a satisfactory overall rate of growth during the last two decades. Thus, between 1950 and 1967, the average annual increase in the GNP, calculated at constant (1950) prices, has been 6.2 percent and, from year to year, the growth rate has shown considerable stability. Hence, formal economic planning has tended to emphasize the qualitative controls deemel necessary to insure balanced development over time, with particular attention to such public outlays on infrastructure as are believed capable of generating a high level of private investment.

The Mexican government is in a strong position with respect to the execution of national planning. Although the federal budget does not represent as high a proportion of the national income as it does in many countries, the planning agency is able to implement its programs with effective credit controls and influence the investment policies of the national railways, the electric power industry, the national petroleum monopoly, and the various manufacturing enterprises which are under the control of the Nacional Financiera.

Successive legal enactments over a long period of years have gradually extended the scope of discretionary administrative controls over imports and exports. The proportion of imports subject to permit has risen, since 1950, from 0.6 to 66.6 percent. During the past decade the control of imports has been employed not merely for the protection of existing industries, but also to bring about the establishment of new industries, influence their location, and in some cases compel their vertical integration and the increased use of domestic raw materials and semi-finished goods. Export controls have been similarly employed, as ere limitations on the export of raw sulfur were used to stimulate development of a domestic fertilizer industry. Generally speaking, ery few enterprise economies is national planning implemented by h broad discretionary powers. Future of economic planning in xico is not limited by any lack of administrative capacity on the t of the Federal Executive to exert a decisive influence on the rate l direction of investment.

CHAPTER 19

AGRICULTURE

Agriculture is complicated by the country's geography and by differing forms of farm organization and land tenure. Mountainous opography, sparse and irregular rainfall, and soil conditions limit the area capable of being cultivated (see ch. 2, Physical Environment). Regionally, there is a distinction between size and organization of farms. In the Center and Southern Pacific zones small plots predominate in which family labor is used intensively, whereas in the North, Northern Pacific, and to a lesser extent in the Gulf zones there is a higher proportion of large farm units in which wage labor predominates and capital goods are employed. Ranging over the differences in farm size and organization is a dual system of land tenure: privately owned lands exist side-by-side with communally held lands.

Largely because of these complexities and because the majority of he agricultural population remains engaged in subsistence farming, agriculture has not grown as rapidly in recent years as other sectors of the economy. Agricultural productivity has increased markedly since World War II, however; it has kept pace with the rapid population growth, and agricultural exports have been an important source of foreign revenue.

Heavy public investment in agriculture has perhaps been the single most important factor accounting for the rise in agricultural productivity. The largest share of government investment in agriculture has gone to irrigation and flood control projects, thus greatly expanding the area capable of being brought under cultivation. In recent years increase in crop yields has accounted for nearly 70 percent of he increase in output, reflecting the effect of government-sponsored research activities and education programs. Other areas of government activity have included: the establishment of credit banks and a price stabilization agency; the furthering of rail and highway transportation facilities; and the encouragement of investment by international agencies and both foreign and domestic private capital.

ROLE OF AGRICULTURE IN THE ECONOMY

Although agricultural production has increased rapidly since the 1940's, the share of agriculture in the gross national product has declined (see table 21). In 1967 the agricultural sector employed ha of the economically active population, but accounted for only 16 percent of the gross national product. This is due in large part to t even more rapid increase in industrial production over the same peri and the large remaining portion of low-yield subsistence farmi engaging the vast majority of the economically active rural populatio In 1966 agricultural production per economically active person w two-thirds lower than the national average of 7,675 pesos (12.50 pes equal US$1.00), while industrial productivity was two-thirds high

Nevertheless, agricultural products, including meat and fish pro ucts, continue to account for slightly over half of the value of Mexican exports. The net foreign exchange produced by agricultur exports—over 40 percent of the total since 1961—is used principal to finance the importation of capital goods necessary for the develo ment of the industrial sector as well as the expansion of commerci agriculture. In 1968 about 15 percent of all farmers produced 75 pe cent of crop sales. With the anticipated increase in the number large, market-oriented farms, it is expected that agriculture will co tinue to provide a large proportion of foreign exchange.

The contribution of crops to aggregate primary sector producti outweighs that of livestock, fisheries, and forestry. Cotton, corn, sug and coffee are the principal export crops while beans, corn, and chilli remain the subsistence crops. In 1967 the combined contribution livestock, fisheries, and forestry to the gross domestic product was percent, while that of crops was 10.4.

The growth of the agricultural population has been greatly slow by urban migration. The supply of agricultural labor remains abu dant, however, and in fact already exceeds the capacity of the d farmed lands to absorb human labor (see ch. 21, Labor). Employme opportunities will remain in such activities as the keeping of mo

Table 21. Mexican Gross National Product and Agricultural Production, 1940–19

(in millions of 1950 pesos [1])

Year	GNP	Agricultural production	Percent of GNP
1940	20, 721	5, 044	24
1950	41, 500	8, 919. 6	21
1960	73, 482	13, 888. 1	18
1967	112, 400	18, 078	16

[1] At 1950 prices, US$1 equals 8.65 pesos.

Sources: Adapted from Banco de México, *Informe Anual, 1967;* Edmun Flores, *Tratado de economía agrícola; Mercado de Valores,* Decem 1968; Social Progress Trust Fund, *Fifth Annual Report.*

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livestock and the more careful cultivation of crops, but increasing mechanization of agriculture will continue to decrease the need for a sizeable agricultural work force. It is estimated that between 1961 and 1975 it will be necessary to provide employment for an additional 1.5 million persons in the agricultural sector, a 26 percent increase from 1960.

Per capita agricultural income remains low, largely because of seasonal wage labor and the agricultural underemployment associated with subsistence farming. The government has attempted to correct the problem by fixing minimum wages for agricultural workers (see ch. 21, Labor). Disparities continue to exist, however, as average wages in the north tend to be about twice the minimum wage, while in the south they about equal it. Until 1965 when the program was abandoned, a source of income was provided by the *bracero* (day laborer) program, under which Mexican farm workers engaged in seasonal wage labor in the southwestern United States. Between 1958 and 1962, *braceros* brought back into Mexico an estimated US$30 million annually.

The rate of agricultural production is increasing. It is estimated that by 1975 Mexico will not only continue to be able to feed her population, but will be in a strong export position in agricultural products. Nutritional deficiencies remain within the country, however. Between 1940 and 1960 deficiency of calories in the diet was largely overcome, but protein and vitamin requirements continued not to be met, especially in isolated rural areas, in the urban areas of the states of Morelos, Oaxaca, Veracruz, San Luis Potosí, and in the Federal District. The government has been active in nutrition programs, particularly in providing vitamins for children, and has encouraged the stability of food prices in the 1960's—a stability which is expected to continue well into the 1970's.

LAND USE AND DEVELOPMENT

Of the total area of the country, the Mexican government estimates that 15 percent is capable of being put under cultivation. It was estimated in 1967 that only 60 percent of the available land was actually under cultivation, even though over 80 percent had been incorporated into farms. Total land incorporated into farms has increased markedly since 1940, and Mexico is approaching the limits of available land for both crops and pastures (see table 22).

Land utilization has also increased, largely because of widespread irrigation projects. The decade 1957–1967 saw an increase of 28 percent in the amount of land under cultivation. But because of such factors as need for additional irrigation, land lying fallow, plant diseases or pests, crop rotation, and the absence of modern agricultural techniques

Table 22. Availability of Land and Land in Farms in Mexico, 1960

	CROPLAND		PASTURES		FORESTS	
	Millions of acres	Percent	Millions of acres	Percent	Millions of acres	Percent
Total availability	72. 4	100. 0	211. 8	100. 0	163. 6	100. 0
Land in farms:						
1940	36. 8	50. 8	138. 8	65. 6	94. 2	57. 6
1950	49. 1	67. 9	166. 5	78. 6	95. 9	58. 6
1960	58. 8	81. 2	195. 2	92. 2	108. 0	66. 0

Source: Adapted from Republic of Mexico, Ministry of Agriculture and Livestock, *Projections of Supply of and Demand for Agricultural Products in Mexico to 1965, 1970, and 1975.*

among the subsistence sector, the latest available data show the ratio of harvested area to total cropland to be around 50 percent.

The Northern zone of the country, despite its semi-arid to arid climate, contains two-thirds of the country's pasture land and has the lowest proportion of idle cropland as it contains the highest proportion of irrigated land. Large areas remain unused, however, because of the distance between desert lands and sources of water. The Central zone, because of population pressure and because it is the seat of the traditional dry-farming economy, has a high rate of land utilization, even though many areas remain too steep for crops. In the Gulf and Southern Pacific zones, on the other hand, the proportion of idle land is high. Not only have hydraulic projects until recently been concentrated in the north, but soil quality is such that it is necessary to allow land to lie fallow to recuperate its fertility. New irrigation and flood control projects and increased use of fertilizers should raise productivity of southern lands.

Uncertainty exists as to the extent and quality of Mexico's forests, which are located primarily in the Center and Southern zones (see ch. 2, Physical Environment). Population pressure and livestock extension have tended to encroach on forests in some areas, but the 1960 census showed that one-third of the country's forests remained unexploited.

The government recognizes that a better use of water resources is basic for a more efficient use of available land, and the Ministry of Hydraulic Resources has been active in programs of irrigation and flood control. By 1967 slightly over one-fifth of the cultivated land was under irrigation, a 25 percent increase over the amount under irrigation in 1957. It is estimated that an additional 3 million acres could be improved by irrigation (mainly in the Northern Pacific zone) and about 7 million acres (in the Gulf and Southern Pacific zones) by drainage and flood control works (see table 23).

ble 23. *Cropland in Mexico and Area Capable of Improvement Through Hydraulic Works, 1960–1970*

(in thousands of acres)

Area	Total	North	Northern Pacific	Gulf	Southern Pacific	Center
otal cropland	72, 751	18, 283	7, 205	13, 593	14, 962	18, 708
ropland under irrigation 1960	8, 685	3, 042	2, 716	79	375	2, 473
otal area subject to improvement 1960	13, 035	2, 118	2, 501	5, 802	2, 024	590
rea improved by hydraulic works in 1961-64 [1]	360	47	12	30	150	121
ogram for 1965–70 [1]	1, 539	319	445	227	178	370
rea remaining for improvement after 1970	11, 134	1, 752	2, 043	5, 545	1, 695	99

Works and projects of Ministry of Hydraulic Resources only.

ource: Adapted from *Projections of Supply and Demand for Agricultural Products in Mexico.*

LAND TENURE

Land holdings in Mexico are characterized by the coexistence of two ystems of tenure and two parallel organizational principles. Holdings ay be privately owned or communally held and they may be consump- on or market oriented. The small size, work-intensive farm units revail, whether private or communal, and are especially characteristic f the center and south. The extensive, multi-personnel, market ori- nted holdings are more prevalent in the north.

Ejidos (production units organized on a cooperative and communal asis) may be as large as the most extensive private holdings, but the olding of the average *ejidatario* (individual worker of the communal nds) is often smaller than that of the average private farmer. Only the large northern *ejidos* is specialization of skill apparent. In the rger operations, common problems—such as irrigation, fertilization, ypes of crops produced, processing, marketing, and transportation— re handled for the entire cooperative.

The agricultural division of the country between extensive and in- ensive forms (north and south respectively) is both historical and dministrative. In the south, traditional Indian intensive production nits of small size survived the Spanish Conquest and the colonial eriod intact. In the north, where the density of Indian population as always much lower, the *hacienda* (large estate) became dominant, ith its semi-feudal organization and its division of labor according to occupational skill. The *hacienda* was much more easily adaptable to the growing market economy of the 20th century than were the small Indian plots of the south.

The *ejidos* have historical antecedents in the communal organization of land holdings that characterized many Indian groups before the Spanish conquest. During the colonial period and the 19th century, communal holdings were almost entirely replaced by private holdings which evolved from the *encomienda* system, in which the Spanish crown granted large tracts of land—and the Indians to work the land—to private individuals (see ch. 3, Historical Setting). With agrarian reform as one of the goals of the Revolution, the *ejidos* have been restored to prominence. As of 1967, of a total of 163.2 million acres covered by the agrarian reform program of 1915, 147.7 million, or slightly over a fourth of Mexico's national territory, had been distributed to 2.6 million *ejidatarios*.

The Constitution of 1917 and the Agrarian Code of 1934 provided for the restitution of land to communal villages and set forth limits and provisions to which persons holding these lands must conform. Land limits per *ejidatario* are 24.71 acres (or 10 hectares) of irrigated land or 49.42 acres in dry land. Those entitled to *ejidal* parcels but for whom no land is available receive certificates of agrarian rights (*derechos agrarios a salvo*) and must await the next distribution of land by the government. Estimates of the number of persons with such certificates range from 500,000 to 1,000,000, but all estimates agree that the number is increasing.

Most often, tillable land granted to an *ejido* is divided into plots or parcels farmed by the individual *ejidatarios;* in a few cases, the cropland is held in common. The pasture and woodland areas are held for communal use by the *ejido*. The *ejidatario* may dispose of the produce of his cropland as he wishes; however, to continue his holding, he must cultivate it. If the land is abandoned for 2 years, it reverts to the *ejido* for reassignment. By law, *ejidal* parcels cannot be transferred from the one person to whom they were originally assigned. The *ejidatario* may augment the size of his holdings and hence their yield by renting additional land from others, and indeed not only is there considerable renting to other *ejidatarios* but occasionally to persons outside the *ejido*.

The maximum amount of land that can be held as private property depends on the use to which the land is put. The limit is generally 247 acres (100 hectares) of irrigated land or the equivalent thereof. Equivalents of one acre of irrigated land are generally 4.94 acres of nonirrigated land, 9.88 acres of good dry-land pasture, or 19.77 acres of poor quality dry-land pasture. Higher limits on private land are established for the production of certain specified crops. The limit is 370 acres of irrigated land for production of cotton and 741 acres for ananas, sugarcane, coffee, henequen, rubber, coconuts, grapes, olives, anilla, cocoa, and fruits. Enough land may be used permanently to upport 500 head of cattle, or the equivalent in smaller animals.

Unlike *ejidal* property, private property can be transferred by sale rom one person to another. Titles to land are registered in each *nunicipio* (municipality). If the owner dies intestate, the land passes o his next of kin. Owners of private property may increase their oldings, as may *ejidatarios*, by renting pieces of land from larger olders, or, unlike *ejidatarios*, by taking additional land in the names f members of the family.

The distribution of land between private and *ejidal* holdings hanged markedly between 1930 and 1940 but has since stabilized o that by 1960 approximately 43 percent of the croplands were in *jidal* holdings (see table 24). The average size of both private and *jidal* holdings in all regions of the country has increased since 1950, vith the exception of the Center zone, where population pressure is he greatest. According to the 1960 census, the average size of private oldings was highest in the Northern Pacific and Southern Pacific ones, while *ejidal* holdings were largest in the Northern Pacific zone see table 25). The number of farms holding 12.35 acres or less varied rom 44 percent in the Center zone to 10 percent in the North and Northern Pacific zones; their share in aggregate cropland varied from lmost 10 percent in the former to less than 2 percent in the latter wo zones (see table 26).

Average size, of course, does not reflect the distribution of land in ndividual holdings nor the amount of arable land within a holding. In an intercensal estimate made in 1964, 9 percent of the private farms ad no arable land; presumably they were ranching or forestry enterprises. Private farms with 12.35 acres or less of arable land constituted 5 percent of the total; 12 percent of the farms had between 12.35 and 1.77 acres; only 4 percent had more than 61.77 acres of arable land. Although there are some very large farms, particularly in the north, nuch of the land of large farms is too mountainous or too arid to be seful. In the north, 6 percent of the land was reported tillable and 4 ercent was actually in crops. In the central region, 28 percent was illable and 19 percent was in crops.

CROP PRODUCTION

Of Mexico's extensive variety of agricultural products, sugar, corn, vheat, beans, cotton, rice, and coffee have been traditionally and remain presently the principal ones (see table 27). In recent years fruits nd vegetables have been gaining an increasing share of both the xport and the domestic market. In 1967 a sharp rise in export sales of orghum and wheat seed indicated the emergence of yet additional roducts of substantial importance.

Table 24. Area of Cropland in Mexico, by Size and Type of Farm, 1930–1960

Type of farm	Percentage shares of total cropland			
	1930	1940	1950	1960
Private holdings:				
Over 12.35 acres	80. 6	45. 9	49. 5	51. 3
12.35 acres or less	6. 1	7. 2	6. 4	5. 3
Ejido holdings	13. 1	47. 4	44. 1	43. 4

Source: Adapted from *Projections of Supply of and Demand for Agricultural Products in Mexico.*

Table 25. Average Size of Holdings in Mexico, by Region, 1950 and 1960
(in acres)

Region	Average size	
	1950	1960
Total	19. 5	21. 7
North	24. 5	32. 4
Northern Pacific	36. 5	51. 1
Gulf	20. 5	27. 4
Southern Pacific	22. 9	26. 4
Center	14. 3	12. 1

Source: Adapted from *Projections of Supply of and Demand for Agricultural Products in Mexico.*

Table 26. Number of Holdings and Area of Cropland in Mexico, by Type, Size, and Region, 1960
(percentage of total)

Region	Percentage of number of holdings			Percentage of area of cropland		
	Private holdings		Ejido plots	Private holdings		Ejido plots
	Over 12.35 acres	12.35 acres or less		Over 12.35 acres	12.35 acres or less	
Total	16. 5	33. 2	50. 3	51. 3	5. 3	43. 4
North	30. 1	10. 6	59. 3	56. 3	1. 8	41. 9
Northern Pacific	26. 7	10. 0	63. 3	54. 8	1. 2	44. 0
Gulf	24. 5	21. 6	53. 9	53. 7	3. 7	42. 6
Southern Pacific	11. 4	40. 9	47. 7	57. 5	7. 2	35. 3
Center	10. 3	44. 0	45. 7	39. 5	9. 9	50. 6

Source: Adapted from *Projections of Supply of and Demand for Agricultural Products in Mexico.*

Cotton has been one of the most important crops in Mexico, both as source of foreign exchange and for its role in the economy. Cotton roducers pioneered in shifting agriculture from subsistence to com- ercial forms of production. Cotton exports have tended to stabilize e export market generally and have helped to move Mexico away rom a geographic dependence on the United States market; a good eal of cotton is sold to Japan and European countries. Domestically, otton output has helped to raise the rural wage level, particularly in e north. In recent years cotton exports have fallen—in 1967 because f decreased demand and in 1968 because of hurricanes in Tampico nd drought and plague in Mexicali—but still provide the largest ingle export source of foreign exchange.

The 1960 census showed that the largest share of acreage is devoted o the cultivation of corn (see table 28). Nearly half continues to come rom the Center zone, which is the focus of traditional and subsistence

Table 27. Production of Principal Crops in Mexico, 1963–1967
(in thousands of tons)

	1963	1964	1965	1966	1967
ugar	21, 535	21, 836	22, 431	23, 400	25, 800
Corn	6, 424	8, 454	8, 502	9, 105	9, 264
Wheat	1, 786	2, 134	2, 282	1, 609	2, 096
Beans	816	892	903	945	1, 008
Cotton	500	566	543	601	565
Rice	296	274	340	390	392
Coffee	142	145	159	185	165

Source: Adapted from *Mercado de Valores*, December 1968.

Table 28. Principal Agricultural Products in Mexico, by Area Harvested and Growing Region, 1960

[in thousands of acres]

Product	Total area harvested	North	Northern Pacific	Cente	Gulf	Southern Pacific
Corn	16, 009. 7	2, 985. 0	694. 4	7, 628. 0	4, 702. 3	
Wheat	2, 151. 5	543. 6	813. 7	727. 5	66. 7	
Rice	342. 7	----------	143. 0	84. 3	72. 9	42. 5
Beans	3, 585. 9	1, 103. 1	213. 2	1, 627. 4	304. 2	338. 0
Sugar	801. 1	122. 8	80. 8	174. 7	389. 7	33. 1
Coffee	738. 5	24. 2	6. 4	95. 1	257. 7	355. 1
Cotton	2, 013. 0	1, 173. 7	770. 9		68. 4	

Source: Adapted from *Projections of Supply of and Demand for Agricultural Products in Mexico.*

agriculture, and strong economic and social forces tend to keep it that way. As irrigated land in the north is opened, production is increasingly moving there and yields are rising. Between 1950 and 1960 production increased by 31 percent; between 1966 and 1967 it increased by about 20 percent. Production is higher than domestic consumption, yet world market prices are inferior to domestic ones; although corn is one of the leading exports, there continue to be large domestic surpluses.

Coffee continues to be a major crop. About half of the harvest comes from the states of Chiapas, Guerrero, and Oaxaca. Mexican *ara bica* coffee commands premium prices, and overall production costs have been lower than those of competitors due to higher yields. Higher coffee earnings have helped raise per capita income in the south, where it still, however, remains the lowest in the country. In 1966 low world market prices lowered coffee output, but in 1968 productivity increased and both domestic and external demand for coffee was being met.

Sugar also continues as a major crop. The external demand for it is not being met, despite higher yields as a result of the cultivation of sugar cane shifting to Veracruz and the content of sugar per ton of cane being increased.

The production of fruits and vegetables is increasing in importance, particularly as export products. Melons, tomatoes, peppers, peas, and cucumbers are some of the most important of the crops in the Northern Pacific zone which are being exported to the United States. Tomatoes are the most important single crop and account for 63 percent of the total value of melon and vegetable exports. There has been a steady increase in tomato output since 1961, largely because of increased fertilization, although there were setbacks in 1967 and 1968 because of weather and blight problems.

Strawberries are produced in the Center zone largely for export. The canning and freezing plants being developed around strawberry producing areas are expected to improve not only the export of strawberries but of other horticultural products as well. Most fruits and vegetables are used both domestically and for export. The one exception is eggplant; since there is no domestic demand for it, the entire crop is exported.

FISHERIES

Mexico's fisheries, like those of many Latin American countries, have remained underdeveloped, despite the fact that Mexico possesses a long coast line and rich off-shore resources. Commercial fishing ventures have been developed only since the late 1940's. Mexico's warm seas contain a fish population of many species rather than large schools of single finfish found in cooler waters. The difficulty of catching a single marketable fish has tended to discourage major investment in he industry. Now, only about one-third of the fish caught in Mexican waters is consumed within the country; the rest is exported, mostly o the United States.

Approximately 60 percent of the annual catch comes from the areas lying off the Pacific coast of Baja California, within the Gulf of California, and along the coasts of Sinaloa and Nayarit. Sardines and tuna are taken off the coast of Baja California mainly by United States boats; the Mexican government collects a tax on the catch. A commercial fishing area of secondary importance lies within the Gulf of Mexico, where the waters provide red snapper, sea bass, and pompano.

Since World War II, shrimping has been the mainstay of commercial fishing along the west coast. Most of the annual take is processed in freezing plants at Mazatlán and Guaymas for shipment to the United States. In recent years, overexploitation of shrimp fisheries along the coasts of Sonora and Sinaloa has caused trawlers to shift south to the Gulf of Tehuantepec. Although about three-fourths of the total shrimp catch still comes from beds along the Pacific coast, in recent years the shrimping industry has developed rapidly in the southern Gulf area. The main shrimp beds are off Tabasco and southern Campeche. Shrimp exports now constitute one of Mexico's major sources of foreign exchange.

LIVESTOCK

Livestock production in Mexico increased from 1940 to 1960 at an annual rate of 1.4 percent. According to the 1960 census, there were 16 million beef cattle, 6 million hogs, 5.2 million sheep, and 9.7 million goats. Until fairly recently beef production suffered from epidemics of hoof and mouth disease, lack of modern breeding techniques, and in southern areas from diseases carried by bats. In the north, where most cattle raising is carried on, cattle breeders encounter drought, depleted pastureland, and, because of shortcomings of transportation, weight loss of the cattle which must travel long distances to reach the main markets in Mexico City. With the importation of breeding cattle accelerated in 1967, it is expected that the cattle population will be raised and both meat and dairy industries improved. By 1968 Mexico had become one of the principal suppliers of beef products to the United States, but domestic demands were still not being met.

FORESTRY

Forest exploitation in Mexico, as in much of Latin America, has tended to be destructive. Widespread cutting and burning have reduced availability of forest land from about 60 percent of the country at the beginning of the colonial period to about 13 percent in the 1960's.

Of the remaining forests, one-third are considered softwood and two-thirds hardwood; pine and oak trees are the most abundant and the most valuable commercially.

Because their availability is limited, forest products are used largely for domestic consumption in construction, as packing material, in manufactured goods (principally furniture), and as pulp for paper. Domestic demand for paper is high and must be met largely by imports: in 1967 paper placed among the top ten imports.

Programs are under way to revise forestry activities so that higher yields will be obtained at the same time there is better forest conservation. The National Institute of Forestry has instituted a program of studies and activities in forest technology and disease control. In 1968, 35 million pesos were budgeted for forest conservation. This amount constituted only a little over 1 percent of the total budgeted for development and conservation of natural resources, as the government continues to place priority on irrigation projects.

AGRICULTURAL ECONOMICS

The principal source of agricultural investment is the government. From 1948 to 1968 appropriations for agricultural development increased from 692 million pesos to nearly 2,000 million pesos, and in this latter year represented 11 percent of the federal budget. The largest share of agricultural appropriations goes towards irrigation and flood control projects. In addition to direct investment, the government subsidizes both private and *ejidal* credit banks, the commodity supply agency, and a program of agricultural insurance.

Another important source of investment is the farmers themselves. Although contributing a declining share of fixed capital investment (hydraulic works, construction, railtracks and roads) since 1940—from 20.2 percent that year to 12.6 in 1960—private semi-fixed capital (machinery, appliances, vehicles, tools) grew from 8.8 percent in 1940 to 15.7 percent in 1960. The number of tractors—one of the main indicators of mechanization of agriculture—increased fourfold from 1940 to 1950. Between 1950 and 1960 the number doubled, and it is expected to double again so that by 1970 there will be approximately 125,000 tractors.

Other sources of investment are international agencies, such as the Pan American Union and the World Bank. In early 1968 a loan of US$125 million was negotiated with the World Bank for irrigation and crop improvements in the Culiacán Valley. Since 1944 the Rockefeller Foundation has financed agricultural research in Mexico, directed primarily into the improvement of wheat and corn strains.

The principal sources of agricultural credit are the private banking system and the official agricultural credit banks. In recent years loans to farmers by private banks have amounted to about 30 percent of otal agricultural credit, and have increased from 1,630 million pesos n 1960 to 3,870 million pesos in 1967. The remaining 70 percent of otal agricultural credit is provided by official agencies, of which the principal ones are the National Ejidal Credit Bank (Banco Nacional de Crédito Ejidal) and the National Agricultural Credit Bank (Banco Nacional de Crédito Agrícola). Government loans amounted to 3,930 pesos in 1960 and increased in 1967 to 8,971 million pesos (see table 29).

The National Ejidal Credit Bank was established through initial funding by the government in 1935 to provide credit for *ejidatarios*. It may make loans to local *ejidal* credit societies or directly to individual *ejidatarios* vouched for by the credit society to which they belong. Loans are generally for: security of products, usually for marketing; obtaining materials or to cover other expenses in the production of crops; repairs, equipment, or livestock; and long term investment, such as construction of roads, acquisition of land or processing plants.

In addition to its administrative and legal departments, the Bank has a commercial department in charge of financing equipment and materials used for production (machinery, fertilizer, seed); handling crops purchased from borrowers or accepted in payment of loans; and administering processing plants for such products as sugar, rice, cotton, and coffee. Since the bank performs a good many services for *ejidatarios* outside the range of normal banking, and in many cases provides financial relief and capital to *ejidatarios* whose income is small at best, it frequently operates at a deficit which must be made up by the government.

Created in 1926, the National Agricultural Credit Bank provided credit to both private farmers and *ejidatarios* until the Ejidal Bank

Table 29. Volume of Agricultural Credit Outstanding at End of Year, Mexico, 1960 and 1967
[in millions of pesos]

Type of institution	1960	1967
Commercial institutions:		
Banks of deposits or savings	1, 235	2, 682
Other finance companies	382	1, 106
Other private finance	13	82
Total private finance	1, 630	3, 870
Government finance agencies	3, 930	8, 971
Grand total	5, 560	12, 841

Source: Adapted from Pan American Union, *Inventory of Information Basic to the Planning of Agricultural Development in Latin America: Mexico;* Banco de México, *Informe Anual, 1967.*

began to function. Since then it has provided credit only to independent farmers. Because it is able to make loans on mortgages or collateral not available to the Ejidal Bank (*ejidatarios* cannot own land) and does not have to supervise complex *ejidal* societies, its operations are more simple.

Both the Ejidal Bank and the Agicultural Bank exert considerable influence over agricultural production. The banks' technicans customarily consult with the farmer and recommend what crops are to be raised: the policy of both banks has been one of favoring loans to increase production of crops which are considered likely to diminish imports or which—like cotton, coffee, and sugar—develop large volumes of foreign exchange.

The Export Bank (Banco de Comercio Exterior) is a source of agricultural credit in that it finances exports through the Ejidal and Agricultural Banks. Loans have facilitated exports of cotton, rice, sugar, coffee, candelilla wax, and strawberries. Loans have also been granted to facilitate imports of fertilizers, insecticides, and agricultural machinery, and for general agricultural development projects, such as land clearing.

Marketing processes in Mexico are largely left to free enterprise; the government intervenes on behalf of the farmer or the consumer only to assure sufficient domestic quantities of certain commodities. The National Staples Company (Compañía Nacional de Subsistencias Populares—CONASUPO) is Mexico's official commodity supply agency. Financed by credit institutions and private capital, CONASUPO is also subsidized by the government to cover operational losses. CONASUPO purchases (abroad if necessary), stores, and redistributes food staples in an effort to keep the domestic market supplied with basic commodities and to maintain stable prices for the benefit of consumer and farmer. Its operations are most extensive in the cities, particularly Mexico City, where it sells at a number of retail shops, but it also sells from trucks which can be sent to any district where prices are considered to be out of line.

There are some products in the marketing of which the government does not intervene, such as fresh vegetables and oil seeds. The marketing of cattle also occurs under free enterprise but under conditions considered by the producers to be disadvantageous. Cattle shipped from the north to Mexico City is handled by intermediaries who find buyers. Producers have complained that these intermediaries frequently delay sale and delivery of cattle and the animals suffer unnecessary weight loss.

ROLE OF THE GOVERNMENT

The most important agencies involved in the formation of agricultural policy include the Ministry of Agriculture and Livestock, the

Department of Agrarian Affairs, the Ministry of Hydraulic Resources, he Ejidal Credit Bank, the Agricultural Credit Bank, the Export Bank, and the Bank of Mexico. The dominant role is played by the agencies of the federal government, and in particular, the Ministry of Agriculture and Livestock.

According to the Secretary of Agriculture, the policy goals of the government concerning agriculture are: self-sufficiency in agricultural production for the entire country; production of raw materials for industry; provision of adequate technical assistance to farmers; development of the supply of credit to agriculture; development of agricultural insurance; support for agricultural education and research; strengthening of domestic markets and assistance in maintaining foreign markets for Mexican agricultural products; encouragement of improvements to the land, and construction of irrigation and drainage works and needed buildings; increased use of mechanical power on farms; stimulation of the production of needed crops; increased production of livestock products; encouragement of the establishment of plants to process agricultural products; and strengthening the credit structure of agriculture and using funds obtained from abroad for certain new projects.

The Ministry of Agriculture and Livestock is divided into four departments—Agriculture, Livestock, Forestry, and Fisheries. The first two are in turn divided into a variety of bureaus and offices dealing with specific aspects of agriculture or stockraising, such as agricultural engineering or livestock diseases. Besides its own programs, the Ministry has considerable influence in directing the activities of credit banks and other autonomous or semi-autonomous agencies, and in fact supervises many of them directly. Advisory organizations exist within the Ministry and contain representatives of the national agricultural and livestock unions and of the credit banks.

The Agrarian Affairs Department is charged with the development of the national agrarian policy as based on the Agrarian Code and complementary laws. Until the repeal of the Federal Law of Colonization in 1962, it was also charged with carrying out colonization projects. The Agrarian Affairs Department administers national lands and *baldíos* (lands lacking established ownership). It is also responsible for the establishment of *ejidos* and for the granting of certificates of agrarian rights to persons who have proper claims to *ejidal* parcels but for whom no land is presently available. It determines which farms or parts of farms are properly subject for conversion into *ejidos* and supervises the division of lands among *ejidatarios* and contracts or agreements affecting *ejidal* property made with persons or organizations outside the *ejidos*.

Since the Revolution, the government's policy has been to form *ejidos* and to grant land from public domains or from large holdings

to as many applicants as possible. In recent years, however, it h
become evident that the supply of worthwhile land for this purpo
will soon be exhausted. This may forecast a change in the activiti
of the Agrarian Affairs Department; greater emphasis may well l
put on administration of existing *ejidos* and on providing *ejidatario*
with closer guidance and expanded facilities.

The Ministry of Hydraulic Resources plans and executes major ir
gation, flood control, and other hydraulic programs. Its irrigati
districts administer and control the use of water from federal irrig
tion projects. On the local level, committees develop plans for the are
to be planted and supervise the use of water. These committees a
composed of representatives from the Ministry of Agriculture a
Livestock, the Ministry of Hydraulic Resources, the Ejidal Bank, t
Agrarian Bank, and the farmers using the water. In 1965, there we
64 irrigation districts administered by this agency. The Ministr
through its Hydrology Division, also maintains some 900 hydroelectr
stations throughout the country.

From 1946 to 1956, during the first 10 years of its activity, t
Ministry of Hydraulic Resources nearly doubled the amount of ir
gated land. By 1965, the country had some 300 dams irrigating near
6.2 million acres and an additional 1.7 million acres irrigated by pum
ing water from deep wells. From 1927 to 1940, outlays for irrigati
projects amounted to from 3 to 8 percent of the federal budget. Sin
then, irrigation works have consumed from 10 to 12 percent of t
budget. Long-range plans (1961–1985) exist to raise the total irrigat
area to 14.5 million acres. The investment in irrigation in 1968 w
budgeted at 2,045 million pesos, or over 90 percent of the entire amou
budgeted for agriculture (see ch. 24, Public Finance).

Land irrigated through government projects must conform to t
provisions of the Agrarian Code, or its is acquired by the governme
The government thus controls vast tracts of land, directly or ind
rectly. The government also exerts influence over what is produce
In making loans, the Ejidal Bank stipulates the purposes for whi
the money may be used and the crops which may be produced.

Through its irrigation districts, the government carries on numero
land reclamation activities. Particularly in the north, projects design
to reclaim land lost to saline content are well under way. At t
present time, the Río Lerma-Chapala-Santiago basin is being dev
oped. Efforts are also being made to rehabilitate the Laguna regio
increase production, and raise income levels of private farmers a
ejidatarios. In its land redistribution policy, the government favo
the small agricultural unit, whether the worker is a private farmer
an *ejidatario*.

The government has begun to recover some of the capital which
has invested in irrigation works: new owners of publicly irrigat

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land are required to pay for the increased value of the land they acquire. Another way in which the government gains revenue is through export taxes: higher productivity on irrigated lands provides more for export, thus raising the revenue derived from taxes.

The government is also active in maintaining experiment stations and agencies for training the rural population in new production methods. These programs, carried out principally in the national irrigation districts, have contributed to higher yields per acre in respect to the principal crops. There is need to expand these services, especially in the non-irrigated areas, and to add more technicians to both the agricultural banks and the institutes for special agricultural programs.

CHAPTER 20

INDUSTRY

In 1967, industry (mining, manufacturing, construction, and power) engaged 22.3 percent of the work force and accounted for 36.8 percent of the gross domestic product (GDP). Between 1960 and 1967 the share of extractive industry in the GDP fell from 5.5 to 4.7 percent, a trend which was attributable to the declining relative importance of metallic minerals. During the same time period the share of manufacturing rose from 23.3 to 26.5 percent, that of construction from 3.5 to 3.9 percent, and that of electric power from 1.2 to 1.5 percent.

Statistics are lacking on the share of handicraft production in Mexican manufactures. One source places the contribution at less than 5 percent of the total value of the manufactured product. Although it is not clear how handicraft production is defined, if labor-intensive factory production is excluded, the estimate appears realistic. In spite of the attraction of Mexican handicrafts for foreign tourists, consumers generally prefer factory-made goods.

In 1967, minerals accounted for 16.8 percent of the value of exports and manufactures for 20.0 percent. These figures, however, overstate the contribution of manufactures to export earnings, since a high proportion of manufactured exports are products in which the degree of processing and ratio of value added by manufacturing is relatively low.

Although statistics are lacking, there is no question that industry provides the greatest share of federal revenues. Not only the net income tax, Mexico's major revenue source, but the heavy gross receipts tax (*impuesto sobre ingresos mercantiles*) as well, fall heavily upon industry, and mining is further subject to a complex system of royalties and production taxes. The burden of taxation on industry, however, is lightened by both federal and state laws which provide exemption periods for new and needed industries. It is, moreover, compensated by the benefits of the high federal expenditures on economic infrastructure.

The industrial development of recent years has contributed substantially to employment, absorbing a high proportion of the stream of rural migrants to urban centers. Thus, from 1950 to 1968, the proportion of the Mexican labor force employed in industry rose from

16.0 to 22.3 percent. However, it is doubtful whether it will continue to accommodate as high a proportion of displaced agricultural workers as in the past, since recent industrial expansion has generally been in the direction of more highly capitalized and less labor-intensive production methods.

Apart from its direct contribution to product and employment, industry has, in a number of ways, constituted a base for the development of the economy as a whole. Industrialization has promoted the growth of the middle class, as a factor for social and political stability. It has reduced the nation's dependence on imported manufactures and decreased its vulnerability to changing conditions in the world market. It has been made the basis of a government policy in support of agriculture, as through the expanded production of fertilizers and pesticides and the beginnings of a rural electrification program. It has afforded steadier and more remunerative employment for workers displaced from agriculture, and it has provided the motive for acquiring a diversity of technical and industrial skills of general benefit to the economy as a whole. Although the relationship of cause and effect may be open to dispute, there is no doubt that the past quarter of a century of industrialism has been Mexico's most vigorous and sustained period of economic prosperity and progress.

The policy of the government has been to channel a high proportion of the nation's capital resources, both public and private, into industry. The impact of this policy has been increased by the special position of the government in the economy, as exclusive owner of the petroleum industry, the railways, and public power. Also, through the intermediation of the Nacional Financiera, the federal government plays an important role in the ownership and management of industrial enterprises for the production of iron and steel, sulfur, fertilizers, pulp and paper, automobiles, freight cars, and textiles, to name only a few. The loans and direct investments of the Nacional Financiera, largely financed by the sale of securities in the domestic market, amounted to over 21 billion pesos (12.50 pesos equal US$1.00) by mid-1967. To this figure must be added over 9 billion in loans, mainly foreign, guaranteed by Nacional Financiera. Of a total of over 30 billion pesos, 69.3 percent had been invested in economic infrastructure, principally in electric energy, transport, and communications; 27.7 percent in industry, mainly in iron and steel, transportation equipment, chemicals, food products, pulp and paper; while 3.0 percent was devoted to miscellaneous purposes.

Private resources have also been channeled by qualitative credit controls into what are described as productive activities—industry and agriculture. As a result, out of total credits of 91.2 billion pesos outstanding to private enterprise from the Mexican banking system at the

nd of 1967, 56.4 billion, or approximately 62 percent, were to industry
see ch. 18, Character and Structure of the Economy). Foreign and
omestic investment in industry, especially in manufacturing, has been
timulated by income tax exemptions on reinvested earnings, acceler-
ted depreciation privileges, and the temporary exemptions, already
nentioned, from income taxes, gross receipts taxes, and customs duties,
hat are offered to new and needed industries.

Virtually all consumer needs are now being supplied by Mexican
ndustry, though often at excessive cost. The major thrust of industrial
xpansion at present is toward increasing the degree of national self-
ufficiency in producer goods.

In terms of material resources, Mexico faces no immediate obstacles
continued industrial development. The country's energy base is
enerally adequate and it is endowed with a diversity of both metallic
nd non-metallic minerals, including substantial undeveloped iron ore
eserves. Mexico today is dependent on foreign capital for only a small
roportion of industrial financing; perhaps the heaviest external de-
endence is on imports of specialized capital goods, the production of
hich is and will for the foreseeable future remain beyond the ca-
acity of Mexican industry. Generally speaking, the nation's engineers
nd technicians have proved capable of effectively utilizing and adapt-
ng imported technology. The achievement of high standards of pre-
ision and quality control, however, continues to be obstructed by a
rious shortage of intermediate industrial skills, while the generally
w educational attainments of most workers makes their upgrading
difficult and uncertain process.

Except for mining, the growth of the industrial sector has been
igorous. In 1967 the rate of construction activity rose 11.4 percent (at
nstant prices), while manufacturing, with an increase of 8.2 percent,
aintained what had been the average growth rate during the preced-
ng three decades. A down-trend in the production of the precious
nd non-ferrous metals continued in 1967; there were declines of 14.2
ercent in gold, 4.3 percent in silver, and 4.6 percent in non-ferrous
etal production, compared with the preceding year. These effects
nded to be offset by increases of 16.8 percent in the production of iron
nd 8.2 percent in non-metallic minerals (see table 30).

Chemicals—especially petrochemicals and fertilizers—currently
nstitute the area of most vigorous industrial growth. Government
lans for expansion in this field have been integrated with programs
f regional development, particularly in the southeast. Other areas of
pid growth include the steel industry, pulp and paper, construction
aterials, electrical appliances, pharmaceuticals, and transportation
uipment. In economic infrastructure, electric power and telecom-
unications are receiving major emphasis.

Table 30. Indices of Industrial Production, Mexico, for Selected Years, 1955–1967

[1950=100]

	1955	1960	1965	1967
Mining	115.6	132.6	133.2	138.1
Non-ferrous metals	103.5	99.4	87.7	84.2
Iron Ore	150.2	300.8	475.4	507.5
Non-metallic minerals	236.2	427.4	526.6	607.4
Petroleum and derivatives	137.2	207.4	286.1	328.6
Crude	123.7	147.2	190.2	217.4
Refined	152.5	275.8	394.8	454.3
Manufactures	137.5	202.9	298.7	359.1
Construction	136.5	201.6	272.5	348.8
Electric energy	158.3	242.6	390.0	474.0
General Index	135.8	197.4	280.9	336.5

Source: Adapted from Banco de México, S.A., *Informe Anual, 1967*, p. 52.

BACKGROUND TO INDUSTRIALIZATION

Institutionally and legally, the years from the framing of the Constitution of 1917 to the outbreak of World War II were vital to the future of Mexican industry. The jurisdiction of the central bank, established in 1925, was gradually extended and implemented with quantitative and qualitative controls over the direction of credit. The 1930's also saw the establishment of the Nacional Financiera, which has become a model government development bank of many countries, and the first of Mexico's numerous private investment institutions.

In the decade before the war, an even more important precondition for industrialization was being fulfilled. For many years, any move toward the protection of "infant industries" had met with effective resistance from the still dominant large landholders. The effectuation of the land reform provisions of the Constitution during the regime of Lázaro Cárdenas (1934–1940) removed an obstacle to industrialization. The political inexperience of the ordinary farmers, beneficiaries of the land reforms, and their dependence on the central government, precluded their emergence as a new land-based political force in support of free trade.

Further, although the economic effects of the land reform have been complex and subject to dispute, there is little doubt that it has been a force for social and political stability. A landless rural proletariat, which had followed the standard of every revolutionary leader for a century, now became members of a class of small holders with a stake in the existing order. While the land reforms were in this way creating a political environment favorable to development, many of the displaced landowners moved to the cities and entered the ranks of industrial entrepreneurs.

It was with the outbreak of World War II that the process of indus- alization began to acquire momentum. As a consequence of the scar- y of imported goods, many plants were able to operate at capacity r the first time and some producers, notably of textiles, entered the port market. A few manufacturers, in spite of their inability to port capital goods, were able to create new capacity with domestic sources, as was the case with the Monterrey glass industry.

During the war years, the nation also increased its sales of raw aterials to warring countries temporarily unable to supply goods. s a result, Mexico built up large foreign exchange balances which be- me useable only after wartime controls on production were relaxed. considerable proportion of these balances flowed into the expansion industrial plants and, by 1947, annual industrial investment was most five times what it had been in 1939.

As the developed industrial nations began to come back into the orld market after the war, Mexican industry was again faced with rong foreign competition and the rate of industrial growth dropped arply. During the preceding decade, however, a profound change ad taken place. Not only had the economic strength and political in- uence of the industrial class grown significantly during the war, but policy of industrial protectionism no longer faced the opposition of a ocal and politically powerful landed interest. As a consequence, it was ossible for Mexican industry to entrench itself behind import duties nd quotas and continue increasing its share of the domestic market.

Also at this time there was a widespread belief in responsible politi- l quarters in the need to industrialize at any cost. After the experience f the depression in the 1930's, many Mexican leaders worked to reduce e vulnerability of the economy to the effects of economic events in e major industrial nations, particularly the United States. It was lso felt that, over the long run, the terms of trade tended to be un- vorable to those countries which exported raw materials and im- orted manufactured goods. Mexico's policy of industrialization was erefore, in part, deliberately aimed at achieving a high degree of onomic self-sufficiency.

As in other developing countries, the earlier stages of industrializa- on involved mainly the production of non-durable consumer goods quiring little capital and simple techniques, such as processed foods, verages, and textiles. In the 1950's, however, the range of import bstitution was rapidly broadened. At first this was largely a "hori- ntal" process and frequently involved only the final stages in the sembly of imported parts and the processing of semi-finished goods. anufactures were expanded to include household appliances, simple achinery such as pumps and compressors, a variety of fabricated etal products, and such chemicals as paints and detergents.

Some progress was also made in heavy industry during the 10 years which followed the war. Portland cement capacity was increased and maintained generally in excess of the demands of a rapidly growing market. Steel production, which had been conducted on a very small scale since the turn of the century, began to expand, particularly as a result of the operations of Altos Hornos de México, a government-sponsored plant which had been launched in 1942. With the help of the United States Export Import Bank, the largest privately owned steel company, the Fundidora de Fierro y Acero de Monterrey, also began to modernize, expand, and integrate its operation. By the mid-1950's, a number of new plants for the production of basic chemicals were in operation and more in prospect. In particular, planners had begun to concern themselves with the need for vertical integration and increasing attention was being given to projects designed either to reduce the nation's dependence on semi-finished imports or to submit Mexican raw materials to more processing before export.

Meanwhile, the government had been making increased outlays on economic and social infrastructure beneficial to industry. Expenditures on general education took a growing share of the federal budget and the number of graduates from Mexico City's great Polytechnic Institute rose from year to year. The highway system was extended and improved and large foreign loans were obtained for the rehabilitation of the rail system, including the replacement of steam with diesel-electric traction. At the end of the war and for some years thereafter rail transport continued to be handicapped by a serious car shortage but in the early 1950's the Nacional Financiera launched the Constructora Nacional de Carros de Ferrocarril which gradually made up this deficit, replacing antiquated rolling stock with modern steel freight cars. Large and continued outlays on irrigation helped to strengthen the agricultural sector, creating broader markets for industrial products at home increasing, by exports, the availability of foreign exchange for the purchase of capital goods abroad. The Comisión Federal de Electricidad (CFE), the government electrical authority had for a number of years been moving into an industry previously dominated by two privately owned foreign companies—the Canadian domiciled Mexican Light and Power Company (Mexlight), which served the Federal District and environs, and the Impulsora de Empresas Eléctricas (a subsidiary of American and Foreign Power). The CFE not only generated and distributed power in regions which had formerly lacked service, but also generated and wholesaled energy to Mexlight for distribution.

By the early 1960's the process of substituting domestic production for the importation of finished consumer goods already approached saturation—rising to around 90 percent of consumption by 1965. As a result, in order to maintain the nation's high rate of industrial growth became necessary to intensify the program of vertical integration, annelling more and more investment into facilities for the produc- n of capital and intermediate goods.

In this process, considerable attention has been devoted to the crea- n of industry in support of agriculture. The development of the tensive sulfur deposits of the Isthmus of Tehuantepec, begun in the rly 1950's, had rapidly raised Mexico to the position of world's sec- d producer and first exporter of this substance. These deposits now came an important element in the resource complex (only phosphates ist still be imported) underlying a government-sponsored fertilizer lustry. Also under government sponsorship, a developing petro- emicals industry began to render the country independent of ported intermediates for the production of many agricultural sticides.

In the mid-1950's, when plans for a Mexican petrochemicals indus- were first announced, they were received with some scepticism both Mexico and abroad. Doubt was expressed regarding the adequacy of pital resources and the prevailing level of technical capability. It s also believed that the limited extent of the Mexican market would eclude the achievement of necessary economies of scale in produc- n. A comprehensive solution is being provided by arrangements iereby foreign firms holding large minority interests are able to pro- le both technical assistance and world marketing outlets.

Even where it has not been possible to escape the effects of sub- timum plant size on production costs, considerable progress in the tegration of Mexican industry has been achieved. Thus, in the auto- tive industry, strong government pressures implemented by tariffs d quotas had raised the proportion of Mexican made components almost 70 percent by 1966. Although the impact of these higher sts on the consumer has been a well understood consequence of a licy designed to increase and diversify the nation's industrial capa- lity, they have recently become a matter of growing concern to plan- rs. It is believed that excessive protection has in some cases subsi- zed inefficiency or resulted in inflated profits, and statements from icial quarters indicate the likelihood that a more selective policy will pursued in the future.

There are clearly certain limits to the process of industrial integra- n, as defined by the character of national resources and the extent the market. In Mexico, as elsewhere, industrialization has generated demand for increasingly complex plants and new raw materials, some which must be imported. Partly for this reason, Mexican planners ve devoted increasing attention in recent years to the promotion of dustrial exports, especially within the Latin American Free Trade rea (LAFTA). National credit institutions, particularly the Banco acional de Comercio Exterior (the Mexican export-import bank), with aid from the Inter-American Development Bank, have been helping Mexican exporters match the credit terms offered by other international suppliers. Because the LAFTA countries are already engaged in their own programs designed to substitute domestic for importe consumer goods, particular attention has been given to the exportatio of simpler and more labor-intensive types of capital goods, such a boilers, heat exchangers, and freight cars, in which Mexico enjoys som comparative advantage. However, some major industrial projects fo the manufacture of consumer durables are being oriented toward production for LAFTA.

In fields where Mexico has had long and successful industrial experience but where there are significant obstacles to the development o export trade, industry is going abroad in a different way. Mexica capital and technology are already being channelled by private initiative into a number of less developed countries for the manufacture o such products as beer and cement.

ROLE OF GOVERNMENT

Both directly and indirectly, the government has played an activ part in industrial development. This has been done by direct ownershi and participation, by the provision of credit, by a policy of protectionism, and by a system of fiscal privileges.

The government has promoted and is part owner of steel companies fertilizer plants, paper mills, chemical plants, an automotive plant and a railroad car factory, to name only some of the more important Through the Nacional Financiera, the nation's largest developmen bank, the government has mobilized both domestic and foreign capita in support of industry. The Banco Nacional de Comercio Exterior (th Mexican export-import bank) is today playing an expanded role i the financing of Mexican industrial exports, with a program designe to meet competitive credit terms offered by European suppliers.

Active encouragement to industrialization has been a fundamenta element in government policy for over a quarter of a century. In 1941 a law was enacted authorizing tax concessions for new industries an industries deemed essential to the nation's economic development. I 1946, this law was replaced by another which extended the maximu duration of the concessions from 5 to 10 years and broadened thei scope to include tariff concessions on imported producer goods.

The present legislation, dating from 1954, provides that two classe of industries may be entitled to concessions: new industries, or thos producing important goods and services never before produced i Mexico, and needed industries, engaging in the production of good or services which are still not produced in sufficient quantity to satisf Mexican requirements. There are a number of alternative bases o which such industries may qualify for tax privileges: if the valu lded in processing is high; if an extractive industry processes its roducts in such a way that they serve as raw materials for Mexican dustry (metallic minerals are covered by special legislation); assembly plants, if they use or produce a sufficient proportion of Mexican arts; export industries which spend at least 60 percent of the direct osts of production in Mexico and need the tax exemptions in order o compete in the world market; and any service industries which are onsidered of vital importance to the nation. Excluded are industries ngaged in the preparation of tobacco or alcoholic beverages, or any ther product considered to be of questionable value to the society.

Tax concessions may involve a reduction of up to 40 percent in the ederal income tax. Imported machinery and other producer goods eeded by an industry, where not available in Mexico or not obtainable n suitable grades or specifications, may be exempted from customs uties. If an export industry incurs 60 percent of its direct costs in ayment for Mexican labor and materials, it may be able to obtain emission of export duties on finished or semi-finished goods. A new r needed industry may also be exempted from the federal government's share of the 3 percent gross receipts tax; this amounts to 1.8 ercent or three-fifths of the tax. Finally, it may be exempted from he federal stamp tax on documents.

The precise extent of exemptions and reductions in each case is etermined by the Ministry of Finance, on advice of the Ministry of ndustry and Commerce. A number of factors are taken into account n making such a decision: the extent to which the enterprise uses Mexican capital goods and raw materials; its capital; its technical fficiency and research facilities; the size and quality of its labor orce; how much of the Mexican market it is able to supply; the imortance of the uses to which its product will be put; and how good welfare program it provides for its workers.

With respect to the term of the concessions, three categories of ndustries have been established: basic, semi-basic, and secondary. A asic industry is one which produces raw materials, machinery, equipment or vehicles for use in one or more activities fundamental to the evelopment of Mexican industry or agriculture. It must have sufcient capacity to satisfy 20 percent of the apparent needs of the Mexican market. Basic industries are granted concessions for a 10-ear period. Semi-basic industries are those which manufacture nished products vitally needed by consumers, industrial tools and quipment, scientific apparatus, or articles used in later industrial rocesses which are considered important. If such an industry can upply 15 percent of the apparent market, the concession will run for years. Secondary industries are those new or needed industries which o not qualify as basic or semi-basic. These receive concessions for a period of 5 years. The concession periods for basic and semi-basic industries may be extended if profits have been extremely low.

Service industries may be granted 5 to 10 year concessions, depending on size, capital, work force, and capacity. Export industries which incur 60 percent of their direct costs in Mexico may receive yearly concessions up to a maximum of 10 years. Concessions, once granted, may be subsequently increased to the extent that an industry increases the proportion of Mexican labor, raw materials or finished and semi-finished goods employed in production. Transfer of concession on change of ownership may be authorized.

Apart from the federal concessions, not only the federal district but all the states and territories have similar legislation, providing for the remission or reduction of taxes for industry. Although the industrial classifications tend to follow the federal pattern, they are frequently more inclusive.

Even more effective stimulus to industry has been provided by protective tariffs and other import restrictions. Government policy has been consistently based on the principle that industries which promote the country's economic self-sufficiency are entitled to protection, and ad valorem duties of 100 percent have been common. There has, however, been growing concern in official quarters with the need to reduce levels of protection in the interests of consumers and in order to promote industrial efficiency. The present policy in establishing new import controls is to protect goods produced in Mexico, as long as their prices do not exceed by more than 25 percent those prices prevailing in the world market.

The list of measures for the encouragement of industrial development includes provisions for accelerated depreciation and the preferential tax treatment of reinvested profits. A recent government industrial policy has been to allow the duty free entry and exit of U.S. goods sent across the border for processing and assembly and the duty free importation of needed industrial power. Attention is also being devoted to integrating the northern border areas within the Mexican market, and subsidies have been provided for Mexican industrial firms capable of competing with goods supplied from the other side of the border.

Though a more systematic approach to development planning has been undertaken in the last 10 years, Mexican government policy vis-à-vis industry has been generally pragmatic, dominated by expediency rather than principle. The government role, however, has been consistently vigorous and imaginative, and it has the apparent justification of success, not only in terms of an average annual increase of 8 percent in the manufactured product over a period of three decades, but also in a high and sustained rate of general economic growth. Although complaints are not infrequently heard, most Mexican industrialists tend take the active economic role of the government for granted, are le to live with it, and benefit by it.

POWER RESOURCES

Almost 90 percent of Mexico's power requirements are provided by troleum and natural gas and most of the balance in the form of ectrical energy. Coal is widely distributed, but the quality of the posits is generally low and it is little used as an energy source. The untry has some uranium and a program for the development of iclear energy.

Petroleum and Natural Gas

Under the Constitution, as amended, the exploration, production, fining, and distribution of petroleum and natural gas, and the manucture and sale of basic petrochemicals, is a government monopoly. his is operated by Petróleos Mexicanos (PEMEX), a state company ith around 62,700 employees. In 1967, PEMEX produced approxiately 95 percent of the nation's energy requirements for mineral hyo-carbons. In that year petroleum and gas exports amounted to US 8.6 million compared with US$36.9 million in 1963, while imports of troleum and petroleum products increased from US$19.6 million 1963 to US$41.9 million in 1967. Thus, although the output of petroum increased from 125.0 million barrels to 149.4 million barrels (1 rrel = 42 gallons), it fell somewhat behind demand. Between 1963 d 1967, the production of natural gas increased from 402 billion bic feet to 574 billion cubic feet.

Known petroleum reserves are mainly concentrated in northern eracruz and in Tabasco (see ch. 2, Physical Environment). At the d of 1967, these were estimated at around 5,486 million barrels inuding gas converted to liquid equivalent—a 23-year supply. Petroum liquid reserves are estimated at 3.1 billion barrels. Natural gas serves are believed to be sufficient to cover present requirements for er two decades. These are located in Tabasco, in northern Veracruz, d around Reynosa, just south of the Texas border.

Mexico has a rapidly expanding complex of pipelines for the transrtation of crude oil, petroleum products, and natural gas (see fig. 7). e central and northern industrial zones are supplied with petroleum d petroleum products from the fields in northern Veracruz. From e Tabasco fields, petroleum products are piped across the Isthmus Tehuantepec to Salina Cruz and distributed from there by the EMEX tanker fleet. Natural gas is piped from the Reynosa field to e northern industrial zone, while Mexico City and the central zone e supplied with gas from Tabasco and northern Veracruz.

Electric Energy

The Mexican central station industry was brought completely unde government ownership by negotiated purchase of the remaining pr vate interests at the beginning of the present decade. Since 1960, th already large public investment in power has been significantly in creased; between 1960 and the early months of 1968, the nation generating capacity was raised from 3,021 megawatts to 6,774 mega watts, of which over 85 percent was in public service.

Although a project for the establishment of a fully integrated ne work has been obstructed by the fact that the system presently operate at two different alternating current frequencies, service has been e tended to all communities with 5,000 or more inhabitants, and existin industrial zones are adequately supplied. In 1966, of the total co sumption of public power, 37.5 percent went to industry, 16.8 percer to commerce, 7.0 percent to agriculture, 17.7 percent to residential cu tomers, and 21.1 to public and other services. The Malpaso projec completed early in 1969, is expected to form the nucleus for the d velopment of a new industrial complex in the southeast.

Capacity is about equally divided between hydroelectric and therm electric plants, with thermal power provided by petroleum and natura gas. A few remote communities are served by small diesel plants. Le than a third of Mexican hydroelectric potential is presently being use

Known reserves of uranium ores exceed 3.7 million metric tons, wit an average content of 600 grams of uranium oxide per ton—a potenti resource of around 2,500 metric tons of uranium oxide. The Mexica government nuclear center operates a reactor and accelerator, and plant for the production of 60 metric tons of uranium oxide yearl is cheduled for completion in the course of 1969. This effort is aime exclusively at industrial and other peaceful uses. Large investmen in conventional power plants continue, however, with a budgeted cap tal outlay of 1.8 billion pesos for 1969.

MINING

In 1967 Mexico maintained its position as the world's leading pr ducer of silver, with an output of approximately 40 million troy ounce Mexican silver production has, however, continued its long run declin in spite of incentives provided by the favorable world prices of r cent years (see table 31). The country's output of gold is of min importance and is diminishing from year to year, as known deposi are exhausted.

Mexico has long been a major producer of non-ferrous metals, pa ticularly of lead and zinc. Lead production, which has been steadil declining, stood at around 168 thousand metric tons in 1967, mainl exported in the form of bars or oxide. Zinc production, which reache

Table 31. Mexican Mineral Production, 1950, 1960, and 1967
[in metric tons]

	1950	1960	1967
Precious metals:			
Gold	13	9	6
Silver	1, 617	1, 385	1, 249
Non-ferrous metals:			
Copper	61, 701	56, 647	55, 624
Lead	238, 076	190, 670	167, 697
Zinc	220, 704	262, 425	213, 727
Antimony	5, 867	4, 231	3, 801
Mercury	127	693	497
Tin	445	371	597
Manganese	14, 461	71, 856	32, 608
Non-metallic minerals:			
Sulfur	n.a.	1, 329, 000	1, 883, 000
Graphite	24, 627	34, 316	40, 690
Fluorspar	n.a.	365	785
Marine salt	n.a.	n.a.	2, 760, 331
Iron	347, 000	896, 000	1, 618, 000
Coal	912, 000	1, 904, 000	2, 322, 000
Petroleum	10, 343, 000	18, 867, 600	21, 069, 900

Source: Adapted from Memorias de la Secretaría de Economía; Banco de Mexico, *Informe Anual, 1967*, p. 54; Secretaría de Industria y Comercio, Dirección General de Estadística.

its highest levels in the late 1950's, has subsequently diminished. Most of the 1967 zinc output of 214 thousand metric tons was exported in the form of concentrates. Copper production has shown considerable stability (it stood at 56 thousand metric tons in 1967) but exports have declined as domestic consumption has risen in recent years. Manganese output is down, due to the exhaustion of producing mines in Jalisco, but is expected to rise sharply as the Molango deposits are brought into production, with a projected capacity of 275 thousand metric tons annually.

Mexico produces significant quantities of mercury and tin, is a leading producer of antimony, and is emerging as an important producer of molybdenum.

Iron production expanded from 347,000 metric tons in 1950 to 1,618,000 metric tons in 1967, and further increases are in prospect. Although Mexico has known iron reserves of around 130 million tons, up to the present virtually the only iron deposits under exploitation are in the north, where coking coals are also found. The government is now taking the initiative in joint ventures for the development of iron deposits in Colima and Michoacan, on the Pacific Coast.

The production of non-ferrous metals is mainly concentrated in the north—most of the lead and zinc in Chihuahua, most of the copper in Sonora. Although there is a fringe of small and often marginal producers in the precious and non-ferrous metals, a few major enterprises account for most of the output.

Among the country's resources of non-metallic minerals, the dome sulfur deposits of the Isthmus of Tehuantepec are of major importance. Reserves of 58 million metric tons have been blocked out by drilling, close to the seaport of Coatzacoalcos and cheaply extractable. These deposits were discovered by oil prospectors in the second decade of the present century, but developed only in the 1950's. Since then, they have made Mexico the world's leading exporter of sulfur (1.64 million metric tons in 1967). Total output in 1967 was 1.88 million metric tons, but an increasing proportion of sulfur output is being employed by the country's rapidly expanding fertilizer industry.

An even more recent development in non-metallic minerals has been the establishment of an operation for the evaporation of marine salts, the largest in the world, on the west coast of the Peninsula of Baja California. Salt exports in 1967 amounted to 2.76 million metric tons, valued at over US$53 million.

The production of fluorite has risen rapidly, and in 1967 it was the source of around US$16 million in foreign exchange. Graphite production has gradually increased to a 1967 figure of over 40,000 metric tons. Up to recently it was believed that Mexico lacked commercial phosphates. However, a government enterprise, Fosforitas Mexicanas, was launched to exploit deposits of phosphorites near Saltillo, with a projected annual capacity of 100,000 metric tons.

Twenty years ago, over 95 percent of the Mexican mining industry (exclusive of petroleum) was foreign owned. Today this picture is rapidly changing. Some years ago, with financial assistance from the government, private interests negotiated the purchase of control in the extensive holdings of American Smelting and Refining and American Metals Climax in Mexico's non-ferrous metals. In a more recent acquisition, Mexican capital has taken over Pan-American Sulfur (43 percent by the federal government, 23 percent by private interests, and 34 percent retained by foreign owners) at a negotiated price of US$49.5 million. These and other acquistions form part of an announced long-run policy designed to bring all the nation's basic natural resources under Mexican control whether by public or private capital.

MANUFACTURING

The value of Mexican manufactures, at constant prices, rose from 8.4 billion pesos in 1950 to 29.7 billion in 1967, while the share of manufacturing in the gross domestic product increased from 18.3 to 26.5 percent. Although there were over 100,000 manufacturing establishments listed in 1965, the overwhelming majority of these were small shops which, in aggregate, made a minor contribution to the total value of manufactured product. Over half of all manufacturing enterprises were concentrated in apparel and food processing alone—many of the latter engaged in the preparation of such simple products as fresh bakery goods and tortilla dough (*nixtamal*). In such enterprises, generally speaking, productivity is low and wages and working conditions substandard, while employers generally lack the knowledge and financial resources needed for the improvement of productive techniques.

This is partly owing to the fact that the declining participation of these sectors in the total manufactured product tends to make them unattractive to the best entrepreneurial talents. In 1940, foods, textiles and apparel represented over two-thirds of the value of Mexican manufactures; today they scarcely account for a third (see table 32). In contrast to the situation which generally prevails in consumer goods and semi-durables, many of the small firms, which have been crowding into such areas as automotive parts and sub-assemblies, have shown much dynamism, and cases can be cited where small shops with half a dozen workers have expanded to become major producers in less than a decade.

Generally speaking, however, the situation does not appear favorable to smaller enterprises. Even in foodstuffs, with the growing market for brand name products prepared and packaged for convenience, large producers are expanding their share of the market. The advantage of large firms is particularly evident in producer goods, which play a growing role in the economy as the process of vertical industrial integration goes forward. Thus, in the paper industry, in spite of a rapidly expanding market, the general inability of intermediate-size and non-integrated operations to compete successfully has been apparent for some time. The industry is more and more dominated by large plants, producing their own pulp, and strategically located with respect to resources, while older and smaller paper mills, clustered around Mexico City and largely dependent on imported pulp, occupy an increasingly insecure position in the market.

In spite of the tendency toward industrial concentration, there are many areas, particularly in producer goods and consumer durables, where the size of the largest Mexican plants remains well below the optimum, in terms of the economies of scale. The primary steel industry is dominated by four firms, which account for 90 percent of production—Altos Hornos de México, the Fundidora de Fierro y Acero de Monterrey, Hojalata y Lámina, and Tubos de Acero de México (an integrated producer of seamless tube). Nevertheless, all at present remain below the 1.5 million tons of annual capacity which is frequently cited as desirable in order to benefit from the economies

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Table 32. Some Principal Categories of Mexican Manufacturing Plants, 1966

	Number of plants	Number of employees	Labor costs	Value of output
			(Millions of pesos [1])	
Meat packing	43	3, 520	48. 8	772. 6
Powdered and evaporated milk	7	1, 475	41. 4	744. 8
Fruit and vegetable canning	50	9, 050	114. 5	632. 1
Fish canning	16	2, 704	33. 6	180. 0
Flour, malt, etc	22	2, 577	79. 4	770. 6
Margarine and cooking oils	62	7, 293	162. 7	2, 900. 0
Stock feeds	30	1, 949	48. 2	1, 193. 9
Beer	19	11, 085	336. 4	2, 597. 4
Cigarettes	16	6, 354	173. 4	1, 522. 1
Synthetic fibres	8	6, 505	174. 9	1, 269. 7
Plywood, veneer and fibreboard	13	3, 488	61. 1	308. 2
Pulp and paper	43	14, 297	406. 5	2, 408. 0
Cardboard	34	2, 015	41. 7	192. 5
Tires and tubes	5	5, 843	270. 1	1, 583. 5
Matches	23	1, 720	42. 7	176. 7
Insecticides	36	1, 813	66. 1	368. 1
Fertilizers	21	4, 071	177. 8	883. 6
Coke and other coal products	4	884	28. 8	275. 0
Flat glass	2	1, 628	45. 7	173. 2
Glass containers	18	10, 129	236. 9	677. 5
Glass bricks and miscellaneous	8	855	17. 7	74. 2
Portland cement	24	7, 155	204. 2	1, 209. 9
Primary iron and steel plants	23	9, 427	263. 2	3, 376. 2
Secondary iron and steel plants	40	23, 157	702. 2	5, 021. 8
Aluminum rolling, drawing and extrusion	9	2, 732	80. 9	513. 8
Automotive assembly	15	16, 601	542. 5	4, 831. 9
Bodies for motor vehicles	16	2, 224	48. 7	154. 2

[1] 12.50 pesos = US$1.00.

Source: Adapted from Secretaría de Industria of Comercio, Dirección General de Estadistíca.

of large scale production. All the major steel companies, however, have been oriented toward technical improvement and, even today, costs for many products are competitive in the world market. By 1970, the government-sponsored Altos Hornos de México (which now accounts for over 40 percent of output) will have a capacity of 2 million metric tons yearly, while that of the largest private producer, the Fundidora de Monterrey, will reach one million metric tons.

A problem of scale has also been faced by the rapidly expanding chemicals industry. For many products, the growth of the Mexican market alone over the next decade fails to justify the establishment of plants of optimum size. This difficulty has been resolved in some cases by the participation of major international companies, which are capable of providing not only capital and technical assistance but also international connections favorable to the development of an export market. In others, it is anticipated that the progressive integration of the Latin American Free Trade Area will provide sufficient export opportunities to justify the establishment of plants of optimum scale.

Government policy has played a prominent part in the development of the chemical industry, particularly in fertilizers and petrochemicals. The latter field is divided between government and private capital, with Petróleos Mexicanos extending its monopoly to the first stages of production but leaving subsequent steps in processing to private enterprise. In 1960, the Mexican petrochemicals industry was still nonexistent; today its list of products is already long and steadily being increased.

In some chemical products, as in synthetic fibers, private enterprise has assumed the leading role. Mexico has been producing viscose and acetate fibres for over two decades and has more recently created sufficient capacity to supply its present needs for nylon and polyester fibres. Celanese Mexicana, with four plants, and six other companies had in 1968 an estimated capacity of 21,180 metric tons of rayon, 16,350 metric tons of nylon, and 5,250 metric tons of polyester fibre.

A traditionally sensitive indicator of the trend of economic activity in general and industrial activity in particular, the production of sulfuric acid, rose from 43,000 metric tons in 1950 to 640,000 metric tons in 1967 (see table 33). This represented a compound annual increase of 17.2 percent. Cement production, which is—especially in Mexico—highly responsive to the general level of construction activity, rose from 1,388,000 metric tons in 1950 to 5,843,000 metric tons in 1967, or 8.2 percent annually. Because of the broad geographic distribution of the raw materials and a relatively low value/weight ratio, Portland cement plants are found distributed throughout 18 states. Not only gray, but white, light-weight, and other special cements are produced. The competitive character of production costs is evidenced by the fact that Mexican cement has been sold in the United States market in considerable quantity.

The Mexican glass industry received its first major impulse from the scarcities of the second world war and, since then, it has not only supplied domestic requirements but has developed a considerable export market. Mexican glass products are sold throughout Central America and some Mexican flat glass has entered the United States market.

In railway equipment, Mexico is presently capable of supplying its own requirements, except for locomotives. The national car factory (Constructora Nacional de Carros de Ferrocarril) has capacity in excess of present national requirements and has recently exported freight cars to Colombia and the United States.

Table 33. Principal Mexican Manufactures in Selected Years, 1960–1967
[in thousands of metric tons unless otherwise stated]

	1960	1964	1965	1966	1967
Producer goods:					
Iron	669	1, 130	1, 159	1, 402	1, 612
Steel ingots	1, 492	2, 326	2, 455	2, 746	2, 993
Portland cement	3, 086	4, 339	4, 198	4, 803	5, 843
Flat glass (thousands of sq. meters)	6, 085	11, 462	10, 759	12, 106	13, 177
Sulfuric acid	249	415	515	579	640
Caustic soda	66	95	104	110	118
Cellulose pulp	199	281	338	353	374
Paper and cardboard	345	529	591	633	691
Artificial fibres	24	31	35	36	39
Cotton textiles	n.a.	120	126	134	143
Trucks and buses (thousand units)	22	31	28	31	37
Consumer durables:					
Passenger automobiles (thousand units)	28	61	67	85	86
Radio receivers (thousand units)	530	956	1, 196	1, 206	n.a.
Television receivers (thousand units)	95	205	230	298	n.a.
Refrigerators (thousand units)	45	96	114	139	n.a.
Stoves (thousand units)	132	180	286	315	n.a.
Consumer goods:					
Sugar	1, 418	1, 815	1, 983	2, 114	2, 252
Beer (million liters)	853	926	1, 026	1, 172	1, 224
Vegetable oils	n.a.	321	335	350	396

Source: Adapted from ECLA, Estudio Ecoñomico de América Latina, May 16, 1968, p. II–146; *Comercio Exterior,* April 1968, Sumario Estadístico; *Guia a los Mercados de México,* Marynka Olizar, 1968, p. 105.

In the automotive field, there has been notable expansion during the past decade. In 1957, around 21,000 trucks and buses and 18,000 passenger automobiles were assembled in Mexico, with less than one-fourth of the components made in the country. By 1967, as a result of government pressure exerted through import restrictions, 37,000 trucks and buses and 86,000 automobiles were produced, and the proportion of Mexican made components had risen to almost 70 percent. This process has been costly to consumers, but has stimulated the growth of a multitude of small plants producing parts and sub-assemblies and has undoubtedly reacted favorably on the general level of technical capability in Mexican manufactures. The production of other consumer durables, such as radio and television receivers, is also being steadily integrated in response to similar policies of protectionism.

As is commonly the case in developing countries, textiles were the earliest area of industrialization. As a result of this fact, combined with inadequate provision for reinvestment and modernization during a long period of years, much of the existing textile plant is antiquated and inefficient. This problem has been complicated in the past by the opposition of strongly organized unions to the introduction of new techniques, and to difficulties experienced in retraining workers to use new equipment. As a result, productivity is low, while wages in the industry are relatively high. Although the industry is estimated to be operating only about 40 percent of capacity ever since the brief export boom during and after World War II, Mexican textiles have tended to be priced out of the world market. Under the auspices of the Nacional Financiera, however, a program for the rehabilitation of the industry is now under way and the Banco Nacional de Comercio Exterior has set up a revolving fund to finance expanded exports.

Brewing, also one of the older established industries, has been distinguished for its efficient operation and the excellence of it product. In 1967, there were 19 breweries operating in various parts of Mexico, but the industry was dominated by three major companies—Cervecería Modelo, Cervecería Cuauhtemoc, and Cervecería Moctezuma. Output has risen faster than population, increasing from 530.4 million quarts in 1950 to 1,293.4 million quarts in 1967, and brewing ranks fourth among Mexican manufacturing industries in the value of its product.

The geographic location of Mexican industry has been a matter of increasing concern to planners in recent years. Except for resource-bound industries, there has been a heavy concentration of plant in and around the Capital, with minor foci of industrial growth in Monterrey and Guadalajara. This has not only tended to aggravate run-away urbanization, with all its attendant social problems, but has undoubtedly led in many cases to the uneconomic location of plants with respect to resources. There are a number of reasons why this has occured: skilled labor is more readily available in the industrial cities, as are public services, and many owner-managers have been influenced by their own preference for urban life, or by the availability of better schools for their children. The government has made a number of moves to counter this trend by the establishment of regional industry but, so far, has not succeeded in arresting the process of concentration.

CONSTRUCTION

Between 1950 and 1967, the share of the Mexican labor force engaged in construction rose from 1.8 to 3.9 percent—a total of around 400,000 workers in the latter year. In the same period, its contribution to the GDP increased from 2.7 to 4.7 percent. In 1966, it was estimated that the total value of all construction amounted to over 22 billion pesos, of which almost 10 billion was value added in construction. Of the latter figure, around 60 percent was paid out in salaries, wages, and fringe benefits. Around half of the total value of construction represented investment by the public sector, mainly in economic infrastructure.

Although private enterprise has generally been able to satisfy the construction requirements of commerce and manufacturing, there is a serious shortage of housing, particularly for lower income groups. In 1966, official estimates placed the deficit at 3.5 million units, including both the shortage resulting from rapid population growth and the large number of existing units considered to be below minimum standards. A large proportion of dwellings, particularly in rural areas, are overcrowded, in serious disrepair, and lack in basic sanitary facilities.

The government has attempted to improve the housing situation by controlling the use of private credit, public credit, guarantee programs, and direct investment. In the effort to divert funds into middle and lower income housing, restrictions have been imposed on the flow of institutional credit into luxury housing. The Banco de México (the central bank) has also set up two trust funds to provide financing for housing program. One is mainly engaged in the provision of loans to credit institutions and the discounting of mortgages, while the other helps private financial institutions engaged in low cost housing operations to cover insufficient guarantee margins and borrower delinquencies.

Both the Mexican Social Security Institute and the Social Security Institute for State Employees are active in the low income housing field, granting loans for the construction of homes and cooperative apartments and directly engaging in the construction of apartment complexes. The National Housing Institute also engages in the construction of low income housing, while National Bank for Public Works and Services (formerly the National Mortgage, Urban and Public Works Bank) not only finances and builds low income housing, but administers a trust fund to finance improvements in homes which lack essential utilities.

In spite of the numerous agencies active in the field and the diversity of methods employed, available funds fall far short of what would be necessary to supply the almost 200,000 new housing units which are needed each year just to keep pace with population growth. The already large housing deficit continues to grow.

Even members of the middle income group find it extremely difficult to finance housing. If they are not the beneficiaries of some special institutional program, they will normally have to pay 50 percent in cash and at least 12 percent on a mortgage repayable over a 10-year period. If for any reason they are unable to obtain financing from a mortgage bank or similar institution, they often find it necessary to pay an effective rate of 18 percent or more to private individuals engaged in mortgage lending.

Of the 6.4 million dwellings reported in the 1960 census, 7.7 percent were of mud, 2.7 percent of unfinished stone or rubble, 49.7 percent of adobe, 9.2 percent of wood, 24.1 percent of brick, and 6.6 percent of other materials. Current construction also displays a broad spectrum of materials and techniques. Although much construction is still carried on using crude materials and labor-intensive methods, Mexican manufacturers are today able to provide a diversity of excellent construction materials and Mexico has numerous splendid examples of advanced architecture and engineering. While there is still a shortage of skills, particularly at intermediate levels, as a result of a general lack of systematic vocational training, the present inability of the country to resolve its housing problem is the consequence of a deficiency in financial resources rather than technology.

HANDICRAFT PRODUCTION

In Mexico, generally speaking, artisan methods of production have shown little resistance to the inroads of the factory system. During many years, a preference for imported goods tended to inhibit the development of any strong tradition of precision craftsmanship along European lines. While the native crafts are distinguished by their color and artistry, today their appeal is rather for foreign tourists than for the Mexican mass market. Although labor-intensive methods are still widespread in such areas as the production of footwear and garments, the pattern here is rather that of the sweated labor of an early industrial society than of any preindustrial artisan tradition.

As regards the native handicrafts, though often crude in execution, these continue to show remarkable color and freshness of conception. The range of styles and techniques employ textiles, pottery, silver and metalwork, lacquer, and a wide variety of other media. In recent years an extensive government program of support has succeeded in infusing these crafts with a new vigor. Under the auspices of the Museo Nacional de Artes Populares (National Craft Arts Museum), a large staff of anthropologists has been working with native craftsmen in over 500 villages. In many cases, innovations in style have been encouraged and techniques have been improved.

International markets have been expanded by a series of imaginative barter arrangements, ranging from a hundred thousand to a half million dollars in amount—Mexican craft arts for Italian sewing machines, Mexican for Japanese handicrafts, and in one case Mexican crafts for bourbon whiskey. In some cases, production has been carried out to exact specifications in a score of villages, quality control maintained, and production schedules met.

Private enterprise has also played a part in reviving, and in some cases enriching, a remarkable diversity of traditional crafts, which vary from region to region throughout central and southern Mexico The persisting vigor of native handicrafts is due in some measure to their association with indigenous communities in remote areas, well out of the path of industrialization. Also, because of their artistry and generally non-utilitarian character, they have secured a national and international market which is relatively immune to the inroads of industrial competition.

CHAPTER 21

LABOR

The labor force was estimated at over 14.8 million in 1968, approximately 31.5 percent of the total population. This low ratio of workers was largely due to the country's rapid rate of population growth, which resulted in a high proportion of children not yet ready to enter the work force (see ch. 4, Population).

About half of the economically active population was engaged in agriculture (see table 34). Of this agricultural work force, the vast majority was engaged in relatively unproductive subsistence dry farming; only a small number was engaged in large-scale commercial agriculture, mainly on irrigated lands, which accounts for nearly two-thirds of the value of the agricultural product.

Labor is linked with government in a way rarely encountered elsewhere among enterprise economies. It plays a large and continuing role in government through broad representation in the councils of the Institutional Revolutionary Party (Partido Revolucionario Institu-

Table 34. Mexican Labor Force, by Economic Sector, 1950–1960

	1950 (percent)	1960 (percent)	1968 [1] (percent)
Agriculture, stockraising, forestry, hunting and fishing	58.3	54.2	49.7
Industrial activities:			
Mining, quarrying, and petroleum	1.2	1.2	1.3
Manufacturing	11.8	13.7	15.9
Construction	2.7	3.6	4.7
Electricity, gas, water and sanitary services	0.3	0.4	0.4
Commerce and banking	8.3	9.5	10.6
Transportation and communication	2.5	3.2	3.8
Services	10.6	13.5	13.6
Unspecified	4.3	0.7	n.a.
Total	100.0	100.0	100.0

[1] Estimated.

Source: Adapted from *Séptimo Censo General de Publación, 1950, Resumen General,* Secretaría de Economía, Dirección General de Estadística, México, D.F., 1953; *Yearbook of Labor Statistics 1967,* International Labor Office, Geneva, p. 77; *Guia a los Mercados de México,* 3d. Ed., Marynka Olizar, Mexico, D.F.

cional—PRI) (see ch. 13, The Governmental System). Since the PRI has dominated Mexican politics for the last 40 years, the political fortunes of labor change with different presidents and as labor succeeds or fails in asserting its role relative to other sectors.

Law and the courts regulate the employment relationship—wages, hours, and working conditions; employment and job security; safety and industrial compensation; union organization and collective bargaining procedures. But lack of an inspection corps is a limiting factor.

LABOR FORCE

The youthful composition of the population is reflected in the labor force (see table 35). In one sense, the young population clearly constitutes an economic handicap. In another, it is advantageous, for where productive techniques are rapidly changing, the young population provides a trainable source of new workers who do not have to unlearn old work habits and techniques.

The number of women in the work force remains relatively low; according to the 1960 census, 53.4 percent of the male population was economically active as compared with 11.6 percent of the female population.

In general, the rising generation of Mexican workers has acquired the reputation of being willing, adaptable, and responsive to monetary incentives. It is these characteristics which have accounted not only for the steady flow of underemployed agricultural workers to urban centers but also for the migration of transient workers (*braceros*) seeking more remunerative employment north of the Mexican border.

Many, however, lack the qualifications needed by industry and, in the process of urban migration, have frequently only exchanged rural for urban underemployment. Apart from deficiencies in education and literacy, many lack the habits of precision, promptitude, and regularity, which are required by industrial employment and which can usually only be acquired after extended exposure to a new technological environment.

For this reason, the cost of supervision is likely to be high and quality control a serious problem. This situation tends to be aggravated by a general deficiency in intermediate skills. Generally speaking, there has been little systematic development of apprenticeship. On-the-job training is the rule and many skilled workers must acquire their training merely by observing the work of others.

Much is being done to correct this situation. Not only is the base of general education being broadened and improved, but also, in contrast to many other Latin American countries, a major effort is being made to expand and improve technical and vocational training (see ch. 9, Education). In 1967, at the higher level, 66,604 students were in at-

Table 35. Mexican Labor Force, by Sex and Age Group, 1960

Age group	Males			Females			Total		
	Population (thousands)	Economically active (thousands)	Economically active (percent)	Population (thousands)	Economically active (thousands)	Economically active (percent)	Population (thousands)	Economically active (thousands)	Economically active (percent)
-15	7, 876. 8	484. 5	6. 2	7, 575. 3	77. 8	1. 0	15, 452. 1	562. 2	3. 6
15–19	1, 738. 8	1, 348. 6	77. 6	1, 796. 4	300. 7	16. 7	3, 535. 3	1, 649. 3	46. 7
20–24	1, 404. 9	1, 330. 1	94. 7	1, 542. 2	298. 5	19. 4	2, 947. 1	1, 628. 6	55. 3
25–29	1, 196. 0	1, 157. 0	96. 7	1, 308. 9	204. 6	15. 6	2, 504. 9	1, 361. 6	54. 4
30–49	3, 253. 0	3, 163. 9	97. 3	3, 314. 2	614. 9	18. 6	6, 567. 2	3, 778. 7	57. 5
50–54	527. 3	509. 6	96. 6	536. 0	135. 1	25. 2	1, 063. 4	644. 7	60. 6
55–59	405. 2	390. 3	96. 3	394. 7	102. 9	26. 1	799. 9	493. 2	61. 7
60–64	372. 0	357. 0	96. 0	372. 7	114. 9	30. 8	744. 7	471. 9	63. 4
65+	576. 6	528. 6	91. 7	618. 4	182. 8	29. 6	1, 195. 0	711. 4	59. 5
Total	17, 351. 0	9, 242. 4	53. 4	17, 458. 9	2, 032. 2	11. 6	34, 809. 6	11, 301. 5	32. 4

Source: Adapted from *Yearbook of Labor Statistics 1967*, International Labor Office, Geneva, p. 20.

tendance at the National Polytechnic Institute alone. At the vocational level, 72,306 students were enrolled in industrial and 86,000 in agricultural training centers.

There is also a widespread recognition of the need for managerial training, and major companies have displayed growing interest in management seminars. In 1955, financed by industry, a productivity center was established in Mexico City to work directly with management in such matters as cost accounting and production control, and the program has subsequently been extended to other major cities.

Technically, the nation has benefitted by increasing interchange with other nations. *Braceros* working in the United States often acquire and bring back new skills. Large firms, operating under franchise or otherwise affiliated with European or American companies, often send employees abroad for training. Some have staffs which have been trained largely by foreign technicians in Mexico under temporary work permits. The extent and importance of this interchange can in part be measured by the increasing prevalence in urban centers of English as a second language and the relatively high premium which bilingual workers tend to command at virtually every level of employment.

UNEMPLOYMENT AND UNDEREMPLOYMENT

The matter of unemployment has received little official attention, and unemployment statistics are not regularly compiled. The most recent figures available are reported in the 1950 census, according to which about 1.3 percent of the work force, was unemployed.

Official attitudes regarding the extent and seriousness of unemployment are reflected not only in lack of data but also in the absence of any formal plan of unemployment insurance in an otherwise comprehensive program of job security. In 1968 the only coverage for involuntary unemployment was provided by the entitlement of permanent employees to severance pay when discharged without misconduct.

In contrast to low reported rates of unemployment, underemployment is high and has been widely recognized as a serious problem. Contributing to underemployment is the seasonality which characterizes agricultural work. Thus, according to a study prepared by the Department of Agrarian Affairs in 1959, over half of the approximately 5 million workers then engaged in agriculture were employed less than 146 days a year.

Apart from seasonality, there is another, deeper problem which contributes to agricultural underemployment. Many of the *ejidal* (communal land) holdings are relatively small tracts of marginal land, often too poor to repay the labor of the number of family workers who attempt to earn a livelihood from them. Although underemployment of this type does not lend itself readily to statistical measurement, the gravity of the problem is amply reflected in the generally low productivity of the sector of the agricultural population engaged in subsistence agriculture on unirrigated lands (see ch. 19, Agriculture).

It is partly the pressure of agricultural underemployment which had led to the annual migration of Mexican *braceros* to the United States in search of seasonal employment—an outlet which has been partly closed in recent years both by restrictive legislation and mechanized harvesting, although some illegal border crossings have continued.

Rural underemployment has also been a factor in the flow of job seekers into the nation's industrial centers, a flow which has continuously exceeded the capacity of industry to absorb relatively uneducated, unskilled workers. This has probably not resulted in any significant increase in the proportion of outright urban unemployment, since when the migrants fail to obtain some sort of employme[illegible] they usually return to their villages. It has, however, transferred a considerable proportion of the net burden of underemployment from rural to urban areas. Such forms of quasi-employment as marginal street vending and the guarding of parked cars are becoming increasingly common in the cities.

The problem of rural underemployment is deeply rooted in the changing character of the agricultural economy. Rapid growth of the population is causing a sharp increase in available manpower at the same time that a shift toward large-scale mechanized operations on irrigated lands is decreasing the need for unskilled farm labor. The system leaves subsistence farmers, who make up the bulk of the rural labor force, at a competitive disadvantage.

Some efforts are being made to cope with rural underemployment; there is, for example, a national program for rural industrialization (see ch. 20, Industry). So far, however, these efforts have failed to keep pace with the growth of the problem.

Wages

Wages and salaries, including those of executives, are relatively low. Most executives find themselves in straitened circumstances, unless they are able to supplement their salaries from property income. Some persons participate in the national lottery in the hope of supplementing their earnings. Others, especially upwardly mobile, middle class, urban dwellers combine salaried employment with a variety of home enterprises. These may range from scientific poultry raising as a family venture to the employment of a small number of workers in a back room of the home, engaged in the production of tile mosaics, the manufacture of novelties for holiday parties, or the braiding of electrical cable.

The Constitution of 1917 lays down certain principles with respect t wages. It states that equal wages shall be paid for equal work, regardless of sex or nationality. It also prescribes a regime of minimun wages, to be exempt from attachment, indemnification, or deduction Though the constitution of 1917 stipulates payment in money or lega tender, the Labor Law of 1931 permits partial payment in the form o any economic advantages agreed to by the worker.

Minimum wage rates are proposed by tripartite regional commissions, composed of an equal number of representatives of employer and union workers under the chairmanship of a representative of th Ministry of Labor. The proposed rates are subject to approval by similar national commission. Rates are established for diverse economic zones, with the help of technical advisors from the Labo Ministry and by majority vote of the national commission. Since th present centralized system for the establishment of minimum wag rates was set up under an amendment to the Labor Law of 1931 whic took effect in 1964, the wide variance between minimum wage schedule which previously characterized the determinations of the local board has been somewhat narrowed.

There is, however, still a wide range in minimum wage schedules which, generally speaking, realistically reflect variations in regiona living costs, stage of economic development, and the conditions of th labor market. They tend to be set high enough, however, to exert a upward pressure on wages, and increases in the minimum wage ar often reflected in some revision of the whole wage structure. Rate in the northern border zone, under competition from United State wage rates, are consistently higher than in the rest of the country Agricultural rates are set lower than the general minimum rates, th difference between the two rates being considerably less in those region characterized by highly developed commercial agriculture.

The average of general minimum daily wage rates throughout th country in 1969 was reported at 21.58 pesos (12.50 pesos equa US$1.00). For agricultural employment, the average was 18.32 pesos ranging from 11.75 pesos in Oaxaca, Guerrero, and Chiapas to 34 peso in the northwestern border state of Baja California.

Violations of minimum wage scales tend to go unreported precisely in those areas where regulation is most needed—in nonunionize establishments and in those outside federal jurisdiction. Some protection, however, is provided for low-income groups in urban areas—b a regime of federal subsidy and control upon the prices of staple foodstuffs, pharmaceutical products, and other cost-of-living items.

There is, however, reason to believe that over the past years the upward trend in money wages has generally outrun increases in the pric level. The rise in wages has, however, been extremely unequal—high i those areas of the economy experiencing rapid growth or where labo has held a strong bargaining position, and tending to lag in sectors characterized by slower growth rates or less effective labor organization.

Thus, between 1960 and 1965, while the Mexico City Wholesale Price Index rose around 10 percent, daily wages in manufacturing were reported to have increased by 56 percent. In mining and quarrying, on the other hand, average hourly wages were reported to have risen only 5.7 percent between 1960 and 1965, while in construction, which tends to exploit a steady migration to urban centers of unskilled and semiskilled workers, the reported increase was 13.3 percent. Dependable statistics on agricultural wage rates are lacking. However, except in the areas of highly commercialized agriculture—such as are found in the States of Sonora, Sinaloa, and Baja California—the increase in the level of agricultural wages also fell far behind those registered by the manufacturing sector.

Worker Participation in Profits

The Constitution of 1917 established in principle that workers in every agricultural, commercial, manufacturing, or mining enterprise should have the right to participate in profits. However, no implementing legislation was passed at that time and, in its absence, profit sharing was not common, though there were a few notable exceptions. In 1962, the Constitution was amended and a chapter added to the federal Labor Law of 1931, giving effect to the profit-sharing provision in the following year. The right of profit participation does not imply any power to intervene in management.

Exemptions are granted to new firms during the first 2 years of operation, new firms making new products during the first 4 years of operation, extractive industries during the exploration period, small firms, private nonprofit charitable institutions, and public institutions engaged in cultural or welfare activities. The only employees expressly excluded are apprentices, domestic servants, temporary workers serving less than 60 days during the year, and general management.

Profits must be distributed within 60 days of the date on which federal income tax is payable. The amount to be distributed will be divided into two equal parts—one to be allocated on the basis of the number of days worked and the other according to the amount of wages earned.

Representatives of government, management and labor worked out a plan which was expected to give workers a share in profits ranging from 2.8 to 11 percent. Thus far, the program has been administered conservatively to provide a modest income supplement to workers, without impairing enterprise incentives.

Bonuses

Custom calls for a year-end bonus, usually paid at Christmas time. Annual bonuses range from a week's pay to a month's or more. Sometimes the bonus is computed as a percentage of pay or, occasionally, of sales, production, or profits. It may be modified for absenteeism, or graduated according to seniority. In any case, the majority of firms regard the customary annual bonus as a regular business expense.

Pay Increases and Promotions

In most major industries, wage schedules are established by collective bargaining and are therefore usually changed only when contracts are renegotiated, typically every 2 years. Individual workers may receive wage increases by promotion to a higher job classification. In unionized establishments, the unions frequently dominate the selection of candidates for promotion, with seniority tending to take precedence over competence. If a candidate is found incompetent after a trial period, usually 30 days, he is returned to his former job without loss of seniority. Where disagreement arises between employer and union on a determination of incompetence, some agreements provide for submission of the dispute to a third party for decision.

Most collective agreements prohibit the employer from demoting workers without the consent of the union; differences are submitted to the competent board of conciliation or arbitration. Some contracts provide that when an employee is demoted through no fault of his own he will retain his former pay and job title.

THE EMPLOYMENT RELATIONSHIP

Except in a few remote areas the traditional elements in the employment relationships are in a rapid process of dissolution and no longer constitute an essential part of the fabric of the society (see ch. 12, Social Values). Recent social studies of Mexican village life appear to confirm the inconsistency of these traditional patterns with a cash economy.

The Labor Law of 1931, established a number of categories of employment. An employer or *patrón* is any physical or legal person who employs another under contract. A worker or *trabajador* is defined as any person who performs a service for another under a contract of employment. Managerial employees and those who are considered to represent management (*empleados de confianza*) are outside the jurisdiction of labor unions and not covered by the terms of collective agreements. The law also distinguishes between probationary and permanent workers; after 30 days a probationary worker normally becomes permanent and cannot be discharged without receiving severance pay except for specified causes. There is also a distinction between permanent and temporary workers; temporary workers may be employed for a specific job or for less than 30 days without acquiring permanent status.

In agriculture, stock raising, and forestry the law distinguishes between resident and casual workers. A resident worker is one who lives free of charge in a dwelling built within the confines of the estate and is customarily dependent for his subsistence on the pay he receives. Any worker who is employed under these conditions for over 3 months becomes a resident; all others are considered casual.

Personnel Policy

Scientific personnel policies are still little developed. In part this is owed to the influence exerted by the unions on the selection of new employees, which, under closed shop contracts, frequently extends to all but the highest positions in the enterprise. Mainly, however, the situation has developed by default, since management has had little awareness of the need for scientific personnel policies. Thus, a candidate is likely to be judged on aptitude and educational qualifications only for the job for which he is being considered and not on his capacity to receive future training and promotion. Even where possible, there is little organized recruiting at educational institutions. The consequences of such personnel policies, or lack of them, were very evident in recent years when some of the older Mexican textile plants attempted to modernize and retrain their employees to operate new machinery; a very high proportion of old employees, entrenched behind seniority privileges, proved incapable of retraining.

Hiring

Minors of either sex, if over 16 years of age, are legally competent to enter into a contract for employment. The contract, whether individual or collective, must be in writing except in the case of domestic service, agricultural work, and casual employment. It must specify the services to be performed, remuneration, hours, place of work, and the duration or other limiting basis of the contract.

Most Mexican workers seek employment either by their own efforts or through their unions. There are a few public labor exchanges but they are little used and not equipped to handle a large case load. The Department of Labor Exchange, operated under the Ministry of Labor and Social Welfare, carries on some activities in connection with migrant agricultural workers but does not function in the industrial field. Private employment offices, operating under government regulation and not permitted to charge fees to job seekers, provide some services. Notable among these is the agency maintained in Monterrey by the Employers' Association (Centro Patronal), a management organization, for the screening of job applicants in an area dominated by a local federation of company unions.

Many collective labor contracts contain an exclusion clause prohibiting the hiring of workers not members of the union. Such closed shop agreements tend to make hiring a union function, and their provisions sometimes extend to the placement of technical and supervisory personnel. Although the employer is privileged to reject the new worker during a 30-day trial period, the system is a difficult one. The unions are mostly of the industrial rather than the craft type and are generally ill-prepared to pass on the qualifications of the candidates they submit for trial. The system thus gives the employer little assurance that candidates chosen will be able to perform satisfactorily. Apart from the closed shop agreements, there are a number of variants of the union shop, some giving the employer a free hand in hiring so long as the employee joins the union within a specified period, but most permitting the employer to hire independently only if the union is unable to supply a qualified worker within a certain number of days.

Employment of Foreigners

According to the federal Labor Law, no enterprise, regardless of its nature, may employ less than 90 percent Mexicans (80 percent if under six workers are employed) in each skilled or unskilled category, unless the appropriate board of conciliation or arbitration authorizes a temporary reduction of this percentage in the case of technicians. The Secretary of Labor and Social Welfare has ruled that this percentage is applicable to an entire enterprise and not to an individual branch. This requirement does not apply to managers, directors, administrators, superintendents, or department heads. However, immigration restrictions tend to limit foreign executives and technicians to skilled jobs for which qualified Mexicans are not available. Alternatively, technical workers may be admitted on temporary permits with the understanding that three Mexicans be trained to fill each job. Since 1962, only firms which have been operating for 2 years are entitled to apply for the admission of managerial and administrative employees, except in the case of essential industries.

Severance

A worker hired for a job which is of a continuing nature becomes a permanent employee after 30 days; he cannot be discharged without severance pay, except for legal cause. Legal grounds for the dismissal of permanent employees without compensation include dishonesty, threats, or violence to an employer or supervisor; willful damage to the work premises or equipment; immoral conduct within the premises;

disclosure of trade secrets; jeopardizing the safety of the premises; intoxication on the job; disobedience to supervisors in work-connected matters without sufficient reason; absence from work more than three times in a month without permission or sufficient reason; and similar offenses if they are of equal gravity.

Management workers (*empleados de confianza*) who lose the confidence of the employer may also be discharged without compensation, as may apprentices who prove to be incompetent. Although the Labor Law of 1931 also provides for the discharge of unneeded workers, it obliges the employer to make heavy severance payments. These payments act as unemployment benefits, since there is no formal program of unemployment insurance. The law does not oblige the employer to observe a notice period.

Severance pay provisions are frequently evaded by small or nonunionized enterprises and, even where the worker obtains the services of counsel, are often settled by compromise. Backed by union representation, however, they are highly effective. Generally speaking, the severance provisions tend to reduce the mobility of labor and impede the introduction of new production techniques. It appears likely that, as the coverage of social security is extended, the system of severance pay may be replaced by a program of unemployment insurance.

HOURS OF LABOR, REST, AND LEAVE

Minimum standards with respect to hours of labor overtime, holidays, vacations, and special leave are spelled out in considerable detail both by the Constitution of 1917 and the Labor Law of 1931 as subsequently amended. More liberal provisions are subject to bargaining.

The Workday and Workweek

The Constitution establishes an 8-hour period for daywork and a 7-hour period for nightwork, with 1 day of rest for every 6 of work. It prohibits unhealthful or dangerous work or industrial nightwork by women or minors under 16 years of age, work by women in commercial establishments after 10 p.m., and work of any kind by persons under 16 years of age after 10 p.m. It also forbids the labor of persons under 14 years of age for any length of time and of persons over 14 but under 16 for more than 6 hours per day. Nursing mothers are entitled to two special half-hour rest periods each day.

The Labor Law establishes a 48-hour maximum workweek for daywork, 42 hours for nightwork, and 45 hours for a mixed workday. It provides for full pay on the day of rest; hence, in effect, all daily pay rates extend to cover a 7-day week. There is, however, no legally established differential for nightwork, although this is often stipulated by collective labor agreements. If a worker is unable to leave his workplace during rest periods and mealtimes, such periods are treated as hours of work. In major industries, manual workers commonly receive a half-hour lunch period as part of the workday and double time is usually paid to workers who must work through their lunch period.

The hours of work in industry are frequently shorter than the legal maximum, and many collective contracts specify a 40-hour week. In agriculture and in small commercial and industrial establishments however, many work beyond the daily and weekly maximums without overtime compensation.

The Labor Law states that the workday of minors under 16 must be divided into two 3-hour periods separated by a rest period of at least 1 hour; hours of work are to be arranged in such a way as to permit school attendance. Minors may not work on Sundays or legal holidays and neither persons under 16 nor women may work overtime; where these provisions are violated, the worker is entitled to triple compensation for time worked in violation. Disregard of all these rules is not uncommon, particularly in small establishments. Violations are seldom reported by participants and tend to escape the attention of the limited inspectoral staffs.

Overtime

Article 123 of the Constitution provides double pay for work in excess of the normal hours of labor and prescribes that overtime work must never exceed 3 hours a day nor be worked during more than 3 days consecutively. The Labor Law of 1931 extends this limitation to prohibit overtime work on more than 3 days in a given week. Workers who must work on their regular weekly day off are paid overtime rates in addition to their seventh-day pay. Collective contracts often provide for higher overtime rates than are legally required.

Holidays

There are five obligatory annual legal holidays, for which full wages must be paid. These are March 21 (birthday of Benito Juárez), May 1 (Labor Day), September 16 (Independence Day), November 20 (1910 Revolution), and December 25 (Christmas). Every 6 years, December 1 (the Presidential inauguration) is celebrated as a paid holiday. The right to paid holidays does not extend to casual agricultural workers.

Collective labor contracts usually provide more paid holidays than the law requires. Frequently included are January 1 (New Year's Day), Good Friday, November 2 (All Souls' Day), and December 12 (Day of the Lady of Guadalupe).

Work on legal holidays must be paid at overtime rates and this provision is usually followed where nonobligatory holidays are granted; often the overtime pay is added to regular holiday pay.

Paid Leave

The Labor Law provides in general that workers who have more than one year's service are entitled to an annual vacation period at full pay of not less than 6 continuous workdays, to be increased to 12 at the rate of 2 days for each additional year of work. All workers under 16 years of age are to receive paid vacations of 18 working days a year. Work during scheduled vacations is to be paid at overtime rates. Excluded from the provision for obligatory paid vacations are agricultural workers, homeworkers, and workers in family workshops or small scale industry (10 or less employees if powered machines are used, 20 or less if they are not). The Constitution prescribes at least 20 days of paid vacation yearly for federal government employees, and the common practice is for government offices to close down for 10 days in May and 10 days in December.

The Constitution requires that women be relieved of heavier work during the last 3 months of pregnancy and entitles them to 1 month of fully paid leave after childbirth. The Labor Law extends these benefits to provide 6 weeks of paid leave before confinement and 6 weeks after childbirth, with half pay for another 60 days if still unable to work, plus unpaid leave as long as required with retention of rights under the employment contract for a year after childbirth. If the employee is covered by social security, the employer is relieved of payment for the portion of wages covered thereby.

Employers are required to grant leave of absence for the performance of public duties such as voting, although wages need not be paid for such time off. If the duty is of a permanent nature or the worker is elected to public office, he retains full rights under the employment contract for 4 years, during which his replacement remains in the status of temporary employee.

Collective agreements often grant paid leave, usually 3 days, in case of a death in the immediate family and sometimes provide paid or unpaid leave for other family crises or events.

HEALTH, SAFETY, AND EMPLOYEE WELFARE

Mexico is distinguished among countries in a comparable stage of economic development by the remarkably ambitious character of its employee welfare programs. Although their effective scope has so far been limited by a relative deficiency in financial resources and a large outstanding deficit in social infrastructure, they have generally been both realistic and well-administered and have tended to outpace the nation's rapid rate of economic growth.

Health and Safety Regulations

Employers are required to observe, in their installations, legal requirements for health and hygiene and to adopt adequate measures for the prevention of accidents. Legislation specifies standards for lighting, ventilation, temperature, and sanitary facilities, as well as the precautions to be taken against the spread of infectious diseases. Labor inspectors are required to pass on conditions in new industrial establishments before they are opened and to inspect existing establishments.

Enterprises are obliged to give initial and periodic physical examinations to employees working with dangerous substances, and a health register of such workers must be maintained. In case of industrial injury, the employer is required to supply immediate medical attention. Establishments which employ 100 to 300 workers must provide first aid rooms competently staffed, and those which employ more than 300 must provide hospital facilities, either on the premises or through contracts with local hospitals. Most large companies comply and some maintain free facilities for the care of both occupational and nonoccupational injuries and illnesses of workers and their families.

Special regulations govern the work of women and minors, forbidding them the operation of hazardous machinery, underground work, work where there is danger of poisoning, work where intoxicating drinks are sold, and work during pregnancy which could endanger the health of either mother or child. A minor under 16 must also obtain a medical certificate before employment, showing he is physically fit for the work in question.

Compensation for Occupational Injuries

Employers are responsible for labor accidents and occupational diseases and must indemnify workers for resulting temporary or permanent incapacity as the law provides. This responsibility exists even if the employer contracts for the work through an intermediary. Liability is sometimes limited in small industries but may never be less than 20 percent of the generally established rates of compensation. An employer may comply with his obligation by insuring his workers with a Mexican insurance company, provided that the insurance is not less than the required compensation. Where social security coverage has been extended, employers are relieved of their obligation to pay compensation.

The amount of compensation to be paid is computed on the basis of the worker's daily wage up to a maximum daily rate established by law. This rate has been raised from time to time but has generally not deviated widely from prevailing minimum wage standards.

If an occupational injury results in death, 1 month's wages are paid to cover funeral expenses and, in addition, the worker's dependents are entitled to an amount equal to 730 days' wages without deduction for compensation received by the worker while disabled. For occupational injury resulting in total and permanent disability, the worker is to receive compensation equal to 1,095 days at the basic rate. For permanent and partial disability, the conciliation or arbitration board grants a proportion of the entitlement in case of total disability, based on a table of values for various disabilities, and giving due consideration to the age of the worker, the degree of disability, and whether the employer has undertaken vocational retraining or other rehabilitation measures. Compensation for total or partial disability must be paid in full, without deduction for wages received during a period of treatment.

Where occupational injury results in temporary disability, the worker is to receive full wages dating from the first day of incapacity. Every 3 months, if the employee has not recovered, either he or the employer may request a decision from the board as to whether temporary compensation will be continued or the disability declared permanent. If the worker is able to return to work within a year of injury and has not received compensation for total and permanent disability, he is entitled to reinstatement. On reinstating him, the employer is able to discharge his replacement without severance pay. When the disabled worker is unable to perform his former job, the employer is obliged, where possible, to give him work within his capacity.

Provisions for workmen's compensation fall far short of covering the loss of earning power from either death or permanent disability. Although the benefits have been increased from time to time, the apparent intent of the legislators has been to establish and maintain the principle of compensation. Meanwhile, the coverage of social security, with its more adequate schedule of benefits, is steadily being extended.

Services To Be Provided by Employers

The Labor Law obliges employers, under certain conditions, to provides a diversity of services for workers and their families. Although not all employers comply, many larger establishments not only meet but even exceed the requirements of the law.

If the workplace is located more than 3 kilometers (approximately 2 miles) or more from a town, and if the employees have a total of more than 20 children of school age, the employer is required to establish and maintain an elementary school, paying the salaries of teachers appointed by the federal school authorities.

Employers of labor in localities outside urban areas are expected to provide comfortable and sanitary housing, for which they may charge monthly rents not to exceed 0.5 percent of the appraised value of the property. Businesses located in towns which employ more than 100 workers are also expected to meet this obligation. Some pay housing supplements in lieu of providing housing.

Where the center of employment is 5 kilometers (approximately 3 miles) or more from towns and the local population exceeds 200, the employer must set aside a tract of at least 5,000 square meters (over an acre) for the establishment of public markets, municipal buildings, and recreation facilities.

Every employer of more than 400 workers is expected to maintain one scholarship for technical, practical, or industrial study, either for a worker or the child of a worker. If more than 2,000 are employed, the firm must provide three such scholarships. All employers are supposed to provide free facilities for the vocational training of their workers. Some companies pay for technical correspondence courses. Such courses have evoked widespread interest among Mexican workers interested in self-improvement.

The Social Security Program

The Mexican social security system operates under the Social Insurance Law of December 31, 1942, its implementing regulations, and subsequent amendments. The Law of 1942 established the Mexican Social Security Institute (Instituto Mexicano del Seguro Social—IMSS) which administers the program through a General Assembly, a Supervisory Committee, and a Technical Board. Of the 30-member General Assembly, the supreme authority of the IMSS, 10 members each are chosen by the President, employer organizations, and worker organizations. The Supervisory Committee, consisting of six members, two appointed by each group in the General Assembly, oversees the financial operations of the IMSS. The 12-member Technical Board, with four members appointed by each group in the General Assembly, administers the program under the chairmanship of a Director General appointed by the President. The Director General has the power to veto directives of the Technical Board, pending appeal to the General Assembly.

The social security program is comprehensive, providing protection against work injuries, nonoccupational illness, disability, old age, death, and involuntary unemployment among older workers not yet entitled to pension. Payments are also made toward marriage and maternity expenses. With certain special exceptions, all workers are eligible for coverage, which is compulsory for those classes and in those geographic areas to which services have been extended by decree of the Federal Executive.

Compulsory coverage does not yet include domestic servants, homeworkers, or family enterprises. However, within the geographic zones where social security services are available, persons not under compulsory coverage may arrange for voluntary insurance on either an individual or group basis.

The principal limiting factor to the program has been a lack of hospitals and other medical facilities in the provinces. Thus, in 1966, of the 86,151 hospital beds available—well over half of which were associated with the social security system—only 3.2 percent were in rural areas. It has also been difficult to enlist medical personnel for service in rural communities, although this is being partly solved by a system of mandatory rural internship. In 1966, a vigorous campaign for the extension of rural services was launched and, from September 1 of that year to August 31, 1967, 11 hospitals and clinics and 139 medical offices were established, staffed by 847 newly-promoted residents and interns and serving areas with a population of 473,000.

On September 1, 1968, somewhat over 8 million employees and family members were reported to be covered under the IMSS. Addition of the special coverage provided for federal employees brings the total to approximately 20 percent of the population.

Services are now available in 480 *municipios* (these correspond to countries) of the Republic—all those with populations of over 100,000 and 83 percent of those with over 30,000 inhabitants. Although the proportion of the population covered has been increasing rapidly, expansion of the program has by no means been limited to this phase. Its underlying philosophy tends toward comprehensive coverage of all social hazards. It has led not merely to the construction of hospitals, clinics, sanitariums, pharmacies, factory medical centers, and institutions for the treatment of mental illness; somewhat unsystematically, it has proliferated a wide diversity of social services. These, in some localities, include such benefits as low-cost housing, recreational facilities, and training in domestic science for young wives. The benefits of the program have been in a piecemeal process of expansion and upward revision since it was initiated a quarter of a century ago.

The IMSS is financed by employer and worker contributions as well as a government subsidy. Its program for occupational injuries is entirely employer-financed at rates graduated according to the risk experience of the industry and individual firm ratings. The other programs are jointly financed, with the employer contributing 50 percent and the government and worker 25 percent each. Producer cooperatives and the government divide costs equally. Total premiums for the old-age, disability, death and survivor programs amount to about 6 percent of taxable payroll, and for the sickness and maternity programs to around 9 percent. Exact contributions and benefits are based on 12 wage categories. The upper limit of these categories have generally been maintained high enough to cover the earnings of the majority of skilled workers. The worker's premium is paid by the employer but may be deducted from his wages if this does not reduce them below the legal minimum wage. Industrial employers generally estimate their own liability to IMSS at around 15 percent of payroll.

Old age pensions are payable to covered workers at the age of 65 if they have made at least 500 weekly contributions (less if first covered after 50). Members over 60 but under 65 who have made 500 weekly contributions and become voluntarily unemployed are eligible for pension at a schedule of reduced rates. The basic pension is equivalent to 34 percent of the workers average earnings during the last 250 weeks of contribution, in accordance with the established wage categories. To this is added 1 percent for each additional week of contribution past 500 weeks (3 percent if the worker has reached the age of 65). Up to 20 percent of the value of the pension is added if the physical condition of the pensioner requires permanent and constant attendance. A family allowance of 10 percent of the pension is granted for each child under 16. The total pension, including the increments mentioned, may not exceed 85 percent of the worker's average earnings in the base period.

Survivor benefits are payable if the deceased was a pensioner or had made 150 weekly contributions at the time of death. His widow, a woman with whom he cohabited in the 5 years preceding death, or by whom he has had children, is entitled to a pension equal to 50 percent of that which was payable to the insured. A widow receiving a survivor's pension becomes ineligible on remarriage but receives a lump-sum payment equal to three times the yearly amount of the pension. Each child under 16, or under 25 if a student or invalid, is entitled to 20 percent of the pension payable to the insured if a half orphan or 30 percent if a full orphan. The total sum of survivor pensions may not exceed the entitlement of the insured. In the absence of widow or orphan, 20 percent of the pension of the insured is payable to his parents and grandparents if they were financially dependent on him.

A nonoccupational injury or illness which permanently disables a covered worker who has made 150 weekly contributions, preventing him from earning more than 50 percent of the earnings customary in his occupation, entitles him to a disability pension which provides the same benefits as those for an old-age pension.

Cash benefits equal to 60 percent of an employed member's earnings, according to wage category, are payable after a 4-day waiting period for up to 52 weeks (78 weeks if recovery appears likely during the period), if a nonoccupational illness incapacitates him for work and he has made at least 6 weekly contributions during the preceding 9 months.

All currently insured persons and their dependents and all pensioners and their dependents or survivors are entitled to medical, surgical, pharmaceutical, and hospital treatment at IMSS facilities from the date an illness begins up to a maximum of 52 weeks for the same illness. A currently insured person incapacitated for work by illness is entitled to up to 78 weeks of treatment if recovery appears likely during the period, and indefinite treatment if he continues to work in covered employment. In case of death, a funeral grant equal to 1 month's wages

or 1 month's pension is paid if the insured made 12 weekly contributions in the 9 months preceding death.

Basic cash maternity benefits equivalent to 60 percent of earnings are payable to women for 42 days before and 42 days after confinement if they have made 30 weekly contributions in the preceding 12 months; the benefit is doubled during the 8 days immediately before and the 30 days immediately after confinement. To this is added a layette, obstetrical services, and a nursing allowance, which may be in the form of free milk during 6 months following confinement if the woman is unable to breastfeed her child. The wife of a member worker or pensioner is entitled to obstetrical services and nursing allowance.

An insured person with 150 weekly contributions is entitled to a marriage allowance equal to 30 percent of the yearly pension to which he would be entitled in the case of invalidity.

Benefits for occupational injury are payable to covered workers without any minimum qualifying period. Such injuries include all those covered by the Labor Law and, in addition, accidents occurring while the worker is proceeding directly to or from work. Temporary disability benefits amount to 100 percent of average earnings up to 72 weeks or until his disability is declared permanent. Compensation for permanent total disability is based on two-thirds of the worker's earnings in the three highest wage categories and three-fourths of earnings in the remaining categories. Partial disability is computed as a percentage of total disability entitlement in accordance with the evaluation schedule in the Labor Law. Survivor benefits in the case of death are computed on the same basis as described above for deceased old-age pensioners except that the widow's entitlement is only 36 instead of 50 percent.

The benefits of the system described do not constitute an upper limit. Many collective agreements with large enterprises provide for benefits greater than those normally provided by the system and the IMSS stands ready to contract for such additional coverage. It is also possible for workers who have made at least 100 weekly contributions to continue insurance after leaving covered employment by paying their own and the employer's contributions.

Mexico's social insurance legislation does not provide for automatic cost-of-living increases to protect pensioners from the effects of inflation, although in the past ample periodic increases in minimum pension rates have provided some protection for workers in the lowest pay categories. Also, inflationary forces in the Mexican economy have been fairly well restrained for over a decade.

A separate social security agency, the Government Employees' Social Security and Services Institute (Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado—ISSSTE), insures employees of the federal government and government corporation On September 1, 1968, over 1,265,000 employees and family membe were covered under ISSSTE. Both employee and governmen employer contributions are larger than in the case of IMSS and add tional benefits are provided, but the program is basically similar.

Other Employee Retirement Systems

Apart from the retirement plan which forms a part of the soci security system, retirement programs are voluntary. Employers ma however, contract with IMSS for old-age insurance for their worke in geographic areas not yet brought under the general social securit program. Most collective labor agreements provide for some form c retirement plan either private or through contract with IMSS. Ther is, however, great diversity among private plans, both as to adequac and method. Some agreements provide for retirement at an earlie age than permitted under the IMSS, depending on completion of minimum period of service. Others substitute lump-sum paymen for pensions. Some employers stipulate that only a limited numbe of workers can retire with benefits each year. Agricultural worke and the employees of small enterprises seldom receive retiremen benefits if not under social security coverage.

INDUSTRIAL RELATIONS

The Federal Government plays a predominant role in labor relations. Exclusive federal jurisdiction is being extended to the textil electrical, motion picture, rubber, sugar, mining, petroleum, petr chemical, cement, railroad, steel, and metallurgical industries. Feder jurisdiction also embraces government corporations, enterprises whic operate in federal zones or territorial waters, and those which carr on work under or connected with federal contracts or concessions. I further extends to disputes affecting, or labor agreements obligator in, more than one state or territory. Beyond this, enforcement of th labor laws is left to the states in their respective jurisdictions. In practice, however, the Federal Government has ample powers to intervene in matters which normally fall outside its jurisdiction.

The Labor Movement

The Mexican labor movement was in effect a product of the 191 Revolution. During the latter half of the 19th century, labor organization was virtually restricted to mutual sickness and death benef societies. In 1917, there were probably less than 30,000 union membe in the country; only two labor leaders, one from Veracruz and on from Yucatán, attended the Constitutional Convention of that yea Nevertheless, the Convention wrote into the Constitution one of th most comprehensive labor programs then in existence. This has been attributed to the part played in the Revolution by an anarcho-syndicalist group, the House of the World's Workers (Casa del Obrero Mundial), under Venustiano Carranza (see ch. 3, Historical Setting).

More significant, perhaps, is the intense nationalism that characterized the revolutionary thinking of the time. In a predominantly agricultural country, where foreign capital dominated mining, industry, and commerce, the development of a strong labor movement could arouse little resistance at home and at the same time could serve the purposes of economic nationalism by providing a lever against foreign economic influence.

Since the Revolution, there has been a close partnership between the state and the labor unions, with a firm basis in the Constitution of 1917. In this relationship, the state has been the senior partner. Historically, the labor movement can be fully understood only in terms of the nation's vigorous politico-economic nationalism.

Consistently, the Mexican government and the politically dominant PRI have attempted to identify the labor movement with national policy. Since, in general, the same course has been followed with respect to both agrarian interests and domestic capital, sometimes in conflict with the aims of labor, total success was not to be expected. Nevertheless, pragmatically, the relationship between government and labor can be described as a successful working partnership.

The boards of conciliation and arbitration have been endowed with increasing authority to the point where they have become independent judicial agencies within their sphere of competence. With these boards empowered to implement the guaranties of the Constitution of 1917 and the Labor Law of 1931, and with the rights of workers on legal strikes under the protection of the army and police, the unions have flourished. At the same time, the unions, with a strong vested interest in the existing political order, have generally found it to their interest to avoid political and economic extremism.

Many diverse currents of thought have come together in the history of the Mexican labor movement since the revolution. Socialism, communism, anarcho-syndicalism, the corporate doctrines of state unionism, and the philosophies of both the International Workers of the World and of labor leader Samuel Gompers have all made their contributions. These elements have tended to merge and re-form continuously in such a way as to lose their identity in an essentially pragmatic complex which is highly national in character.

From 1917 onward, Mexican labor organizations have tended to operate under the aegis of national federations closely associated with the government. The first of these to occupy a dominant position was the Regional Confederation of Mexican Workers (Confederación Regional Obrera Mexicana—CROM). CROM was formed in 1918 and at first, still influenced by elements trained in the ranks of the anarcho-syndicalist House of the World's Workers, showed considerable disposition toward direct action. By 1924, however, CROM was officially committed to a policy of "reasonable evolution" and closely identified with the regime of President Plutarco Elías Calles (1924–1928). In the late 1920's and the early 1930's, as a result of acute conflicts of personality and principle, there were a series of defections from CROM. When Vicente Lombardo Toledano left the federation—later to establish the general Confederation of Mexican Workers and Farmers (Confederación General Obrera Y Campesina de México—CGOCM) in 1933—the dominance of CROM was ended.

Immediately after its establishment, the CGOCM set up the National Committee for Proletarian Defense (Comité Nacional de Defensa Proletaria) in support of the regime of President Lázaro Cárdenas (1934–1940). It was this committee which took the initiative in calling a national unification congress, out of which emerged the new dominant federation, the Confederation of Mexican Workers (Confederación de Trabajadores Mexicanos—CTM), in February of 1936. Vicente Lombardo Toledano had, during CROM days, held a socially moderate position, infused with nationalism. Under the influence of the events and world socio-political climate of the 1930's, however, he moved definitively into the Marxist camp, as did many other leaders of the CTM.

Early in the regime of President Manuel Ávila Camacho (1940–1946), signs of disruption became evident, but, by this time, World War II was under way. The association of the U.S.S.R. with the Allied cause provided the basis for an agreement signed on June 4, 1942, between the CTM and several minor federations to unite in pursuit of war aims and strike only in cases of extremity. Later, it led to the employer-worker compact of 1945 between the CTM and the Mexican Manufacturers' Association (Cámara de la Industria de Transformación).

After the end of the war, and with the beginning of the term of office of President Miguel Alemán (1946–1952), Vicente Lombardo Toledano found himself trapped between his Marxist principles and a general reaction (see ch. 3, Historical Setting). He was expelled from the CTM in 1947 and subsequently formed a splinter left federation, the General Union of Mexican Workers and Farmers (Unión General de Obreros y Campesinos de México—UGOCM) the organization has subsequently steadily declined in influence.

Later, the CTM left the communist oriented Confederation of Latin American Workers (Confederación de Trabajadores de América Latina) and affiliated with the International Confederation of Free Trade Unions, formed in 1949. In 1953, it joined the Inter-American

Regional Organization of Workers (Organización Regional Interamericana de Trabajadores—ORIT). In 1954, the CTM took the official position that, without renouncing their role in the class struggle, they recognized the primacy of their obligation to the nation.

The purged CTM remains in 1968 the most influential of the federations, accounting for over half of the country's union membership. In 1949, efforts by CTM at labor unification had led to the formation of the Workers' Unity Bloc (Bloque de Unidad Obrera—BUO). Although loosely organized and unregistered, it is an influential organization and an important link between the labor movement and the PRI.

The UGOCM, the Mexican affiliate of the Communist World Federation of Trade Unions and of the CTAL, is not legally recognized and is therefore without bargaining rights. Representing perhaps less than half of one percent of union membership, it is influential mainly among underemployed agricultural workers. It is the action branch of the Popular Socialist Party (Partido Popular Socialista—PPS) and was linked in the early 1960's with the agrarian program of land invasion by unemployed farm workers (*paracaidismo*—literally, "parachutism") in Northwest Mexico. At present the extreme left draws its remnants of strength from the personal influence of a few isolated figures—such as Vicente Lombardo Toledano—identified with Mexican history, who still command respect even among their opponents. With less legendary left extremists, the prevailing order has at times dealt harshly.

No certified figures exist regarding union membership. Estimates vary, but the unions claim 3 million—close to 20 percent of the total economically active population and 40 percent of the nonagricultural work force. The most highly unionized sectors of the economy are the Federal Government, the mining and petroleum industry, transport and communications, and the larger manufacturing enterprises.

Collective Bargaining and Grievance Procedures

The Labor Law of 1931 guarantees the right of all workers except managerial employees (*empleados de confianza*) to join unions. Unions have generally succeeded in obtaining union shop contracts and most of the larger industries operate under the closed shop system. The law, which requires a minimum of 20 workers for the formation of a union, recognizes five classes of unions: craft unions; company unions, or vertical unions organized within one enterprise; industrial unions, or vertical unions including two or more enterprises; miscellaneous trades unions, which may be formed when there are less than 20 workers of one trade in a given municipality; and national industrial unions, vertical unions including one or more interstate enterprises in a given industry. These unions, organized under charter, have juridical personality and the capacity to acquire personal property and such real property as may serve the direct purposes of the organization.

There are two kinds of collective agreements. The basic form is a contract between one or more labor unions and one or more employers or employer organizations. The other is the collective regulation, or *contrato ley*, extended by federal decree to all workers in a given branch of industry in a specified region if a collective agreement has been concluded by two-thirds of the organized workers therein. Such a decree gives legal sanction to the agreement and brings it within the scope of federal jurisdiction. When the contract covers work performed solely within one state and in an industry not otherwise within the normal sphere of federal jurisdiction, the President bases his decree on advice from the appropriate local executive.

If there is more than one industrial union within an enterprise, the Labor Law of 1931 provides that the employer must conclude a collective contract with the union to which the greatest number of workers belong. The provisions of the contract extend to all personnel in the enterprise except managerial employees, even if they are not union members. Such contracts shall determine the amount of wages, hours of work, speed and quality of labor, rest periods, vacations, and other stipulations as agreed upon by the parties concerned.

Any collective contract may be partly or completely renegotiated every 2 years at the instance of any party to the contract, subject to the following terms: if requested by the union it must be backed by the approval of at least 51 percent of the membership; if requested by the employer it must be agreed to by at least 51 percent of the workers covered by the contract. Application must be made at least 60 days prior to expiration of the existing contract. If, during that period, the parties do not reach agreement or consent to an extension of negotiations, the dispute is submitted to the appropriate board of conciliation and arbitration for a hearing, during which the old contract remains in effect.

Employers and workers may, by mutual agreement, set up their own machinery for settling disputes arising out of alleged violations of labor law or contract; agreements, at least in major industries, usually establish comprehensive procedures for this purpose. In default of voluntary agreement, disputes are submitted to the appropriate tribunal for conciliation and, if necessary, arbitration. If an employer refuses to submit to arbitration or to accept the arbitral decree rendered, the labor contract is declared terminated and the employer must pay 3 months wages plus 20 days wages for each year of service. If the workers refuse, the labor contract is terminated. Unions and employers may, in an effort to reach voluntary agreement, use the services of a staff of technical mediators maintained by the Ministry of Labor and Social Welfare. This is often done, since the long delays involved in submission to boards of conciliation and arbitration, and the subsequent process of appeal, provide considerable incentive to voluntary settlement.

Strikes and Shutdowns

The right to strike of workers, including those employed in nationalized industries, is guaranteed by law, provided certain conditions are met. Before the strike, a copy of the grievances in writing must be submitted to both the employer—who must answer them within 48 hours—and to the competent board of conciliation and arbitration, which will attempt reconciliation. The employer must receive at least 6 days notice (10 days in the case of public services). The strike must be called by a majority of the workers employed by the enterprise at the time of the notice and must be called for one of the following purposes: to correct disequilibrium between the factors of production, that is between the distributive shares received by labor and capital; to force an employer to conclude a collective agreement or to live up to the terms of the existing contract; to exact a revision in a collective agreement upon its expiry; to support a legal strike (i.e., a strike in compliance with the above conditions).

If the enumerated conditions for a legal strike are not met, the board of conciliation and arbitration may, within 48 hours of the suspension of work, declare the strike "Nonexistent," or in effect, outside the protection of the law. If this is the case, the workers have 24 hours to return to their jobs. If a worker fails to comply, his contract is terminated and the employer is free to replace him. In the case of a legal strike, the worker's rights in the job are protected. The board may require that enough workers remain on their jobs to ensure the safety of the premises and avoid undue delay in subsequent resumption of work. Strikes are illegal if a majority of the workers commits acts of violence against persons or property, or if the strike is against government establishments and services in time of war.

In general, the overwhelming majority of disputes is settled without resort to strike, the total number of strikes is small, and most strikes occur outside federal jurisdiction. Over the years, the number of working days lost on strike has been low.

Partial or total temporary shutdowns (*paros*) are legal either where the competent board of conciliation and arbitration determines on review of the evidence that the condition of the market renders them necessary in order to maintain prices at a level which covers costs, or for a variety of other cogent reasons such as lack of raw materials. Workers receive no compensation during a legal shutdown but retain their right to reclaim their jobs for 30 days after resumption of work.

CHAPTER 22

DOMESTIC TRADE

The share of commerce in the Mexican gross domestic product (GDP) rose from 23.7 percent in 1939 to 33.0 percent in 1946 as a result of wartime shortages and inflation. A readjustment took place in the 1950's and the claim of commerce on the GDP has for a number of years past stood substantially at pre-war levels. During the same period, the proportion of the labor force engaged in commercial activity appears to have increased slightly and was estimated in 1967 at a little over 10 percent. The share of transport and communications in the GDP has gradually declined from 5.8 percent in 1939 to 4.1 percent in 1967, a trend which reflects the increased efficiency of these services, whose importance to the economy has been growing rather than diminishing. In 1967 they occupied around 3.7 percent of the work force. The contribution of electric power to the GDP rose from 0.5 to 1.5 percent between 1950 and 1967—a period which saw an increase of 350 percent in installed capacity and 375 percent in the generation of electric energy—although the proportion of the labor force engaged remained virtually constant at around one-half of 1 percent.

In the course of the last three decades, there have been fundamental structural changes in the Mexican market. Before World War II, consumer goods, apart from foodstuffs, textiles, and apparel, were largely imported for the exclusive use of upper income groups and a small middle class. Today virtually all consumer goods are domestically produced and imports are virtually limited to capital and producer goods. By the same token, a far higher proportion of Mexican raw materials of agricultural and extractive origin are consumed by Mexican industry. With a rising standard of living (per capita real income has more than doubled since World War II), foodstuffs and other subsistence items tend to occupy a place of declining relative importance in the composition of retail trade.

To some degree, Mexico is still caught in the vicious circle imposed by a narrow market. Its limited extent tends to prevent the achievement of economies of scale in the production of many goods. As a consequence, numerous potential consumers are priced out of the market, a result which tends to perpetuate its own cause. More and more, however, the merchandising of consumer goods is mass oriented with respect to price, sales techniques, and the terms of credit, and urban Mexico at least is beginning to exhibit many of the market characteristics of a high consumption economy.

The trading community has never dominated Mexican life or politics. Since World War II, when Mexico began to emerge as a modern economy, the industrial and financial interests have tended to assume a position of leadership, which they have shared with the intellectuals. Nevertheless, there has never been any stigma attached to trading activity. The courtesy which is customary in social relationships is extended to business dealings. There are few marks of servility in the conduct of even humble tradespeople; success in any honest line of endeavor is treated with respect. Business relations are generally free of ethnic implications. The prevailing values affecting commercial relationships differ little from those which prevail in the most developed industrial economies.

COMMERCE

In Mexico today, very few families remain completely outside the market economy. In spite of the continued primary dependence of a considerable proportion of the rural population on subsistence agriculture, there are few economically active Mexicans who do not receive cash payment for some proportion of their goods or services. Barter and other non-monetary economic arrangements are the exception rather than the rule and, as residual elements of a preexisting order, they are of interest to anthropologists rather than to economists. Improved communications have intensified wants and increased responsiveness to monetary incentives. The radio has penetrated everywhere and, generally speaking, it is precisely the areas of subsistence farming that have furnished the majority of *braceros* to the United States, as well as seasonal farm workers in Mexico's commercial agriculture. These have returned to their communities, year after year, with money, enviable presents, and the vision of a different way of life.

The government has not, as a rule, provided direct encouragement for commercial activity (as it has for agriculture and industry); its regulatory policies have often diverted credit away from commerce into production. Nevertheless, as the indirect beneficiary not only of agricultural and industrial growth, but also of the vast improvements which have taken place in transport and communications, commerce continues to flourish and to maintain its relative share of the gross national product.

Market Geography

In Mexico, neither the urban concentration of population nor disposable income has been as extreme as in some other Latin American countries. On the one hand, the sweeping land reforms of the 1930's have to some extent restrained the rate of migration to the cities. On the other, heavy outlays on irrigation and other agricultural programs, plus the proximity of the U.S. market, have led to the development in many rural areas of a prosperous commercial agriculture, tending to counterbalance the concentration of income in a few urban industrial centers.

The Mexican market is, nevertheless, very heavily concentrated, particularly in Mexico City and its suburbs. While there are few available figures on retail sales and statistics on wholesale sales are incomplete, summary investigations indicated that the Federal District (Mexico City), with around 15.1 percent of the population, accounted in 1966 for 35.2 percent of wholesale sales, followed by Guadalajara (6.4 percent), Monterrey (4.7 percent), and Puebla (2.7 percent)—the four cities together accounting for approximately one half of the national total. Eleven other urban centers each accounted for between 1 and 2 percent of total wholesale sales.

While the market for goods of immediate consumption is somewhat more widely distributed than the above figures indicate, sales of consumer durables are even more highly concentrated in the Capital. This is attributable in part to the superior availability of services necessary for their operation—electricity, water, sewage, television broadcasts—but is also influenced by more developed merchandising techniques and more extensive facilities for consumer credit.

The market for luxury items is still more narrowly circumscribed. Private automobiles may be considered to fall within this category, in view of prevailing income levels and the general availability and cheapness of public transportation. In 1966, the Federal District accounted for over 47 percent of total automobile sales.

Channels of Trade

In Mexico, a tendency toward integration of the distribution process is by no means new. Thus, the half dozen Mexico City department stores in existence at the end of World War II were all, in varying degrees, involved in manufactures, particularly of textiles, on the one hand, and in wholesale distribution on the other. One of them had branches in several leading cities. Since the end of the war, the integration process has accelerated rapidly. Chain supermarkets, which made their appearance in Mexico City in the late 1940's, have subsequently multiplied and spread to the provinces.

Department stores are still of growing importance in urban Mexico. The few that existed at the end of World War II, mostly established by French capital in the closing years of the 19th century, were reminiscent, in appearance and merchandising methods, of the gaslight era. These have either changed their methods or have lost out against modern competition. The beginning of the transformation can be marked by the establishment, in the late 1940's, of Sears Roebuck department store in Mexico City, introducing open displays, modern credit practices, and a liberal policy on the return of merchandise. This was also the first large mercantile establishment to begin what became a general migration toward suburban shopping centers, made necessary by urban expansion and growing congestion of traffic in the city center.

In the last decade, there has also been the advent of discount houses, which have become a factor in the integration process. Faced with difficulty in obtaining merchandise due to pressure on suppliers by conventional retail outlets, they have, in some cases at least, responded by engaging in manufactures and promoting their own brands or foreign brands produced under franchise.

The general pattern of wholesale distribution does not differ greatly from that which prevails elsewhere. Direct distribution from the manufacturer to retailer or agent is common in the case of high valued durables and where continuing customer service forms an intrinsic part of the value of the product. The role of the wholesaler, on the other hand, is relatively important in the distribution of miscellaneous merchandise.

In spite of the relatively low cost of services, handicraft production of goods on a custom basis has shown little power of resistance before the advent of standardization in manufacturing and merchandising. This is probably attributable to the fact that, apart from Indian craft arts, Mexico has had no vigorous tradition of handicraft production. The development of any such tradition tended to be inhibited by the superior status associated with imported goods, which long dominated the luxury market.

The public markets continue to play a significant role in distribution, although in the cities they have been drastically transformed—rehoused in sanitary structures and conducted under improved supervision. Even in the Capital, these have held their own well against the supermarkets. The latter have not been notably successful in managing fresh produce and even middle-class shoppers are likely to make periodic visits to the public market to buy fruits, vegetables, and perhaps poultry. The markets have also held their own with many lower income buyers of clothing and miscellaneous merchandise, not necessarily on a basis of either price or quality. Mexico has not, for the most part, been a country of isolated farms, but of villages. The tradition is a gregarious one, and many Mexicans prefer the atmosphere of the public markets to the cold impersonality of the supermarkets and large mercantile establishments.

Although Sears Roebuck abandoned the mail order phase of its Mexican operations after 2 years' trial in the late 1940's, mail order merchandising has been carried on with varying success for over 40 years. Successive devaluations of the currency in the 1940's and again in 1954 proved discouraging for the major firms in this field and caused them to restrict their operations. Many specialties, however, continue to be sold successfully by mail order, especially to rural dwellers. Popular priced garments with big city styling, sold by mail, also appear to have a strong appeal in remote villages. It is probable that, with continuing monetary stability, mail order may come to play a significant role, along with radio broadcasting and other media, in bringing rural Mexico within the orbit of an urban culture.

Generally speaking, the trend of commerce in Mexico today is centripetal, tending toward an even further concentration in the larger urban centers. Urban migration, the rapidly declining proportion of agriculture in the gross domestic product, and improved transportation all tend in this direction.

Private monopoloid situations tend to prevail only locally and in certain services where they are subject to some degree of public regulation. Elements of buyer monopoly are found in some fields, such as the marketing of cigarette tobacco, where manufacturers may supply young plants and advance credit against crop delivery at a prearranged price.

Familial relations, which once played a prominent role in Mexican trade, are today of declining importance. While corporate organizations (which dominate Mexican trade) still tend to be closely held and many of them remain under the control of families or individuals, the locus of policy decisions is tending to shift more and more to hired management. This process has been hastened by the growing power of financial groups, some of which control scores of commercial and industrial enterprises. Within such groups, frequently the key banks or *financieras* remain under the direct control of the founding individual or family, while their subsidiaries are conducted by professional managers who frequently possess no more than a small minority interest. Political influence and privilege are of course important in Mexico, but probably no more so than in any other national economy.

Except in export agriculture (as in the case of winter vegetables from the west coast), trade associations play a relatively small role in commerce. Although the government-sponsored chambers of commerce (*cámaras nacionales de comercio*), in which membership is mandatory, serve a useful function as clearing-houses for information, they have no marked impact on the structure of trade.

Commercial Practices

Although the Mexican market continues to be characterized by a high degree of geographic concentration, it has been changing rapidly in its social composition and in the character of its merchandise. A few decades ago, the market for other than subsistence items tended to be limited to the recipients of property income and a narrow fringe of professionals and bureaucrats. Today, the middle class has been extended to include not only an increasing number of engineers, managers, and foremen, but also a large number of the intermediate technicians required by a developing industrial economy.

Merchandising methods have been changing rapidly since the end of World War II; there is growing awareness of the possibilities of high volume at reduced markups and lower unit costs: in the late 1940's, goods were still behind counters and credit was almost exclusively on open account and restricted to the demonstrably well-to-do, but these methods did not withstand the competition of open displays, modern credit practices, and a more liberal policy on the return of merchandise.

Some commercial methods have been slow to change, such as inventory management. Many of the large retail establishments which deal in fashion goods have no systematic procedures for inventory control and clearing slow-moving items. Accounting practice also tends to lag behind the requirements of a changing economy. Advanced methods in cost accountancy tend to be limited to industry, and few commercial establishments are in a position to judge with precision which lines of merchandise and which classes of customers are profitable and which are not.

Companies also report difficulty in recruiting and training sales personnel, a situation which some attribute to a persisting insufficiency of response to monetary incentives and others to lack of "aggressiveness" on the part of Mexicans. Numerous foreigners have found their way into selling.

In general terms, Mexico today presents a wide spectrum of commercial practices, ranging from those of the late 19th century to the most advanced methods of the 20th. In an essentially competitive market, firms are subject to an increasingly rigorous process of selection and elimination and it can be anticipated that in another decade there will be few traces of the older order.

FORMS OF BUSINESS ORGANIZATION

In general terms, business activities in Mexico are governed by the Commercial Code and the Law of Commercial Companies, with their amendments. The individual who customarily engages in commercial transactions, broadly defined to include financial activities and the production for sale of manufactures or farm products, has certain specific obligations. He must record his mercantile status in the Public Commerical Register and with the appropriate official Chamber of Commerce or Industry. He is also obliged to maintain and register certain books of account with the Federal fiscal authorities and to preserve his books and commercial correspondence open to government inspection for a period of 10 years.

Companies are subject to both the Commercial Code and to the Law of Commercial Companies if they customarily engage in commercial acts or are organized under the provisions of the latter law, which prescribes various organizational forms ranging from the general partnership to the corporation. All are juridical persons with legal name and domicile and have substantially all the legal capacities and obligations of an individual.

The conduct of business in Mexico through whatever form of organization is distinguished by a profit sharing feature, in effect since 1963. All but the small commercial, industrial, and agricultural enterprises are required to share a proportion of their net profits after taxes with their employees (see ch. 21, Labor).

Partnerships are formed by signature before a notary of an instrument containing prescribed information on the nature of the company and the basis of its organization, which is recorded in the Public Commercial Register on judicial order. Although a fixed capital is usually indicated, provision may be made for increases and decreases above a stated minimum, in which case creditors must be apprised by inclusion in the company name of the words "*capital variable*" or the initials "C.V."

The general partnership (*sociedad en nombre colectivo*) is composed exclusively of general partners, fully and jointly liable for the obligations of the partnership. There are two variants of the limited partnership. The *sociedad en comandita simple* is made up of general partners, fully liable, and special partners liable only to the extent of their contribution, whose names do not appear in the firm name and who may not normally participate in management. The *sociedad en comandita por acciones* is a limited partnership in which ownership is evidenced by shares, the shares of the general partners being registered and not transferable without the consent of all general partners and two-thirds of the special partners.

The limited liability company (*sociedad de responsabilidad limitada*) is an intermediate form which stands between the limited partnership and the full-fledged corporation. In it, there are no general partners, a fact which must be advertised by inclusion in its name either of the descriptive words or the initials "S. de R.L.". The number of members is restricted to 25, their ownership may not be evidenced by bearer shares, and transfer of share is hedged about with numerous restrictions.

The *sociedad anónima* or corporation may be formed either by execution of an instrument before a notary, like a partnership or limited liability company, or through public subscription. In the latter case, its prospectus must be approved by the National Securities Commissions. The capital may be fixed, in which case it is identified by the initials "S.A.," or variable, in which case the initials "S.A. de C.V.." are appended to the firm name. If capital is fixed, it may be represented by either registered or bearer shares; if the capital is variable, the shares must be registered.

Numerous restrictions are placed on the characteristics of corporate shares. Thus shares with limited voting rights are cumulative and preferred, with preference in liquidation, and shareholders are given preference in subscription to new issues in proportion to their holdings. Mexican corporations cannot hold their own stock in treasury.

Regular stockholders' meetings must be held at the legal domicile of the corporation at least once yearly. Major decisions generally require extraordinary stockholders' meetings and a higher quorum than is called for in the case of routine actions. Any proposals which might adversely affect the interest of a given class of stockholders must be approved by them at a special meeting.

Safeguards for the interests of the shareholders are prescribed by law. Thus, the accounts of the corporation are submitted to the scrutiny of *comisarios* or special auditors who represent the stockholders' interests, as against possible abuses on the part of management or the board of directors. Minority interests have special representation on the board. In the past, investors have tended to depend more on the reputation of the management or of the underwriting financial institution than on regulation. Regulatory bodies exist, however, not only in the National Securities Commission but also on the stock exchanges (*bolsas de valores*) with which public issues must be listed, and the effective scope of their surveillance is gradually being extended.

Both producer and consumer cooperative societies (*sociedades cooperativas*) are covered by special legislation and operate under the supervision of the Ministry of Industry and Commerce. A number of producer cooperatives have been set up with government participation for the provision, under contract or concession, of public services.

THE REGULATION OF TRADE

A broad range of natural resources—minerals, ocean resources, forests, and agricultural land—are within the national domain, and their exploitation is closely regulated and subject to federal concession.

Apart from this, federal authorization is needed for many lines of activity supervised in the public interest. Federal permits or concessions must be obtained for the operation of facilities for communications or public transportation, and regulation extends to both rates and standards of service. Authorization by the Federal Executive, acting through the Ministry of Finance and Public Credit, is needed in order to establish banking and credit institutions, securities exchanges, bonding companies, insurance companies, and public warehouses, and the provision of all these services is subject to special legislation and surveillance. The manufacture of foods, pharmaceuticals, cosmetics, and chemical preparations for domestic use is under federal license and inspection.

There are also special restrictions on entry into certain types of economic activity. Thus, the national petroleum monopoly of Petróleos Mexicanos extends to the first phase of petrochemical production and federal approval is required for the investment of private capital in subsequent stages of processing. Further restrictions apply to the extent of foreign control and the proportion of foreign investment in a number of fields, particularly extractive and basic industries, transport and communications, and public information.

Subject to federal legal prohibitions against any action on the part of state or local authorities which will impede the free movement of goods in interstate or international commerce, the licensing and regulation of local trade is the prerogative of the states and *municipios* (corresponding to counties). Since the fiscal powers of the latter are dependent on state legislative action and consequently the latitude permitted to local authorities is essentially at the discretion of the states, there is considerable variation in the extent to which the regulation of local trade is governed by the states and left to the *municipios*. There is similar diversity in its effectiveness, as regards inspection, quality, and weights and measures, although the latter problem tends to be simplified by the universal prevalance of the metric system.

The federal government indirectly exerts considerable influence on local trade practices through its agricultural marketing organization, which operates at the retail level (see ch. 19, Agriculture). The same indirect approach has been taken by federal authorities to the problem of smuggling—which is particularly prevalent along the northern border—for the purpose of reducing the need for direct surveillance. The government subsidizes certain domestic producers, enabling them to compete with contraband in the border areas. In the central zone, on the other hand, smuggling tends to be confined to compact items of high value. Black marketing is not common, although a certain amount inevitably prevails where such items as meat are brought within the scope of price control.

Patents, Trademarks, and Copyrights

Protection of property rights by patents and the registration of trademarks is based on the Federal Constitution and the Law on Industrial Property and its Regulation. Novel inventions, improvements, and industrial models and designs may be patented by registration with the Ministry of Industry and Commerce. A patent for an invention or improvement is valid for a maximum of 15 years and may not be extended; rights are terminated the end of 12 years in cases where industrial application has not been undertaken within the territorial confines of Mexico. The maximum term for patents on industrial models or designs is 10 years, reduced to 7 if not exploited within the country. Patent rights may be freely transferred. Foreign patents, as such, are not protected in Mexico, although the owners of patents registered in countries which are signatories of the Paris Convention enjoy a priority period of 12 months during which they are protected against the acquisition of rights by local registrants.

Novel and distinctive trademarks and product designations may also be protected by registration with the Ministry of Industry and Commerce. Such registration is valid for a period of 10 years, renewable indefinitely for subsequent 10-year periods. Original commercial advertising materials may be protected in the same way, although the 10-year period is not subject to renewal. The exclusive right to employ a firm name is protected for an indefinite period without need for registration, though it lapses with disuse.

Copyright protection is extended to virtually every type of original literary, intellectual, and artistic work by the Constitution and the Federal Copyright Law. Such works are protected even when not registered or published, but provision is made for their registration with the Copyright Office, a branch of the Ministry of Education. In general, a copyright remains valid throughout the life of the author and for 30 years after his death, after which the property passes into the public domain. Mexico is a signatory to various international copyright conventions, treaties and agreements. Foreign domiciled authors not covered by international agreements are protected by Mexican law for 7 years, after which their work passes into the public domain unless registered with the Mexican Copyright Office.

Government Intervention in the Market

The Constitution contains a very comprehensive proscription of monopolistic practices, prohibiting corners in essential articles of consumption, efforts to impede free competition in industry, trade or services, agreements to restrict competition or raise prices, and in general whatever acts serve to create an undue advantage in favor of the few and to the detriment of the general public or of any social class. Little has been done to implement this clause by statutory provisions or enforcement organizations enabling the government to move directly against monopolies or combinations in restraint of trade.

Intervention by the government for the protection of consumers has taken other directions. In one important instance, a government monopoly has been the means of control. The Compañía Nacional de Subsistencias Populares (CONASUPO) is charged with the dual task of ensuring consumers an ample supply of basic commodities at reasonable prices and guaranteeing an adequate return to their producers. In order to accomplish this, CONASUPO has discretionary power to engage in the monopolistic practice of acquiring such products from either domestic or foreign producers, to the exclusion of private middlemen. These products have been sold either directly to the consumer or under a regime of controlled prices. Price controls have also been extended to other essential cost-of-living items, including pharmaceuticals.

Generally speaking, the policy of the government with respect to intervention in the markets has been pragmatic and flexibly administered in terms of an underlying view of the public interest, with both timing and method of intervention dictated by changing needs, circumstances, and capabilities. Thus, in the 1930's, confronted with the inadequate capacity and extent of the privately owned electric power industry, the government established the Federal Electrical Commission, which not only entered areas where service was lacking but also generated power which it wholesaled for distribution over existing private networks. Subsequently, faced by the need to accelerate the increase of generating capacity, expand and integrate the national distribution system, and establish uniformity in alternating current frequency, the government acquired the two major private power systems by negotiation. On December 29, 1960, a Constitutional amendment was adopted, giving the nation a monopoly in the generation and distribution of electric power for public service.

Certain monopoloid situations in private industry have been constituted in accordance with legislation governing the "saturation" of markets. The purpose is to permit the exclusion of new entrants, in order to avoid ruinous competition, with its adverse effects on the economic situation of both the competing firms and their employees. Among the lines which have been brought under this legislation are flour milling and the manufacture of china.

In accordance with the underlying concept of the public interest indicated above, the government has established various public service monopolies. Frequently these measures have reflected a political or economic nationalism generated by a long history of foreign intervention during the post-colonial period (see ch. 3, Historical Setting). Thus, the rail system was made a state monopoly, a move which was largely motivated by the action of foreign owners in withdrawing Mexican rolling stock north of the border during the Revolution. The expropriation of foreign petroleum interests under President Lázaro Cárdenas was consistent with the general policy of post-revolutionary governments.

The process of nationalizing those industries deemed vital to the nation's politico-economic integrity is still going forward. In recent years, however, except in the case of public electric power service, policy has been aimed at promoting the acquisition of foreign-owned industry by Mexican private capital, rather than toward government ownership. Thus, although the government facilitated the transfer, Swedish and American interests in the Mexican telephone system passed to private hands, and similar cases are found in lead, zinc, and sulfur mining (see ch. 23, Foreign Economic Relations).

CONSUMER SERVICES

In its allocation of scarce capital resources, the Mexican government has tended to give priority to investment in economic, as opposed to social, infrastructure. There have been heavy federal outlays on electrification throughout the last two decades and major investments in improved telecommunications are now in progress, but the level of expenditures on water supply and sewerage facilities still appears insufficient to keep abreast of the nation's growing requirements.

Around 87 percent of electric power capacity at the end of 1967 was under government ownership, operated in public service, supplying 4,080,000 subscribers. Service has been extended to all towns with 5,000 or more inhabitants and considerable progress is being made in rural electrification. In 1966, residential subscribers (79.3 percent of the total) consumed 17.5 percent of power generated in public service; commercial subscribers (19.4 percent) consumed 16.8 percent of the total. Industrial and agricultural users, each representing 0.2 percent of the total number of subscribers, consumed 37.6 and 7.0 percent, respectively. Rates are moderate and have not significantly limited the increase in public consumption, which has been extremely rapid.

In spite of the relatively high development of electric power service, Mexico has not yet been able to achieve the economies of an interconnected network, owing to the fact that the system supplying most of the central zone generates at 50 cycle current, while the various regional systems supply 60 cycle current. This lack of uniformity necessarily constitutes an obstacle to the marketing of equipment affected by variations in frequency. Since the government acquired the major private power companies in 1960, administrative integration has been going forward, with the announced objective of establishing a basis for a technically integrated system. So far, however, the complex of problems involved in change-over to a single alternating current frequency have not been resolved.

In 1961, with the sale of Swedish and American interests, the Mexican telephone system, passed to a Mexican private company. In 1963, the Mexican government acquired 500 million pesos (US$1.00 equals 12.50 pesos) of its preferred stock and ex officio seats on the board of directors for the Minister of Finance and Public Credit, the Minister of Communications and Transport, and the Director General of Nacional Financiera.

These events marked the beginning of a phase of rapid expansion. In 1949, the country had only 241,732 phones in service and, although this figure more than doubled in the subsequent decade, a growing backlog of applicants for service had never been absorbed. Between 1963 and August 1967, however, over 361,000 new phones were placed in service—an increase over 60 percent—bringing the total to 947,535. As the backlog of demand for telephones in existing service areas was satisfied, it was possible to embark on a major program of extension and improvement embracing all aspects of telecommunications.

The 1966–1970 National Telecommunications program involves a total investment of around 7 billion pesos. It includes expansion of the existing microwave system to include 21 trunk routes connecting major population centers, from coast to coast and from border to border. The objective of the present plan is to provide efficiently interconnected telephone service to all towns in the Republic with over 2,500 inhabitants. The Microwave system will be linked with a major communications center in the Federal District, which will also serve as a clearinghouse for international communications.

These will be provided through the new satellite communications station in Hidalgo, one of the largest in the world and the first in Latin America. This station will provide communications with three-fifths of the countries of the world. A second station designed to complete world coverage will be built in Guerrero whenever the demand for communications with the remaining countries—mainly Asian—appears to warrant it. The new microwave-satellite complex will provide a basis for the expansion and improvement not only of long distance telephone, but also radio, television, and telex services, and ultimately for high-speed data transmission.

At the end of 1967, Mexico had 455 commercial radio stations and 32 commercial television stations. The government-operated national telegraph network, which covered 92,000 miles at mid-1968, was then in process of extensive relocation to highway routes, in order to reduce maintenance costs and interruptions to service. At the end of 1967, the telex system served 2,680 subscribers in 33 urban centers and in the following year public telex service was initiated in the Capital and seven other major cities.

The government-operated postal system is comprehensive and provides all classes of service, with air post between all larger population centers. It has not, however, been brought within the scope of the intensive modernization program which is going forward in telecommunications. Procedures tend to be cumbersome, controls ineffective, and prevailing pay schedules have made it difficult to attract qualified personnel. Delays, frequent even between major cities, seriously affect service to many small communities beyond the reach of central administrative surveillance. Owing to lack of temporary help, congestion is particularly serious throughout the winter holiday season.

Water and Sewage Services

Accurate published figures on Mexican water supply and sewerage facilities tend to be limited to data on the progress of specific projects. No adequate inventory of existing installations is available. Mexico City is faced by a serious and still unresolved water supply problem and the sanitary sewage system of the Capital is in need of major expansion and rehabilitation. A similar situation tends to prevail in other rapidly expanding urban areas. Although some progress is being made in the provision of potable water to rural communities, often through cooperative, self-help projects, conditions here are even less satisfactory. The continuing high incidence of gastroenteritis as a cause of death is indicative of the widespread lack of potable water and adequate sanitary services.

Reported investments throughout Mexico on water supply and sewerage facilities between September 1, 1966, and August 3, 1967, were 222.1 million pesos, of which 98 million were devoted to rural water supply projects. Dividing this outlay by population growth in the same period, this amount breaks down to around 150 pesos per additional inhabitant. Even allowing for the self-help component in rural programs, this sum is inadequate to keep abreast of the nation's growing requirements.

In due course, the situation described above will doubtless be rectified. At the present time, however, it is the outcome of an established schedule of priorities in the use of scarce resources. Thus, the Ministry of Hydraulic Resources, responsible for 65 percent of urban waterworks and 80 percent of urban sewer systems, spends less than one-tenth as much on water supply and sewerage facilities as it does on irrigation.

Other Consumer Services

Because of Mexico's extensive tourist trade, a wide range of hotel accommodations is available in larger urban and tourist centers and, in the interests of promoting tourism, rates are generally regulated and often posted. In those localities which draw many Mexican vacationers, cottage accommodations are frequently provided because of the custom of many well-to-do vacationers of travelling with family and servants. Entertainment services—theaters, nightclubs, motion pictures—and restaurant facilities are similarly distributed. Roadside accommodations—motels, restaurants, service stations—are still not widely distributed, even along main tourist routes. Private travel agencies serve the major cities, and the government provides centers for tourist service and information.

Barbershops, staffed with skilled barbers, are widely distributed, though beauty shops tend to be limited to larger urban centers, as are manicurists. Good dry cleaning services are available in the more important urban centers, but laundries are uncommon owing to the prevalence of domestic servants, although the major cities have shops which specialize in laundering shirts. The street shoeshine boy is a familiar sight in the larger towns and cities. Funeral services are available in all the larger towns.

Printing and legal services are available in all but the smaller urban centers, but competent public accounting services tend to be restricted to the larger cities. Professional letter-writers for the illiterate are still found throughout Mexico. Modern secretarial services and those which povide part-time office help are available only in the larger cities, as are forwarding, storage, and transfer services. Employment agencies are uncommon, although the federal government maintains some offices for the provision of transient agricultural workers and the local manufacturers' association in Monterrey maintains an office for screening industrial job applicants.

TRANSPORTATION

In spite of much mountainous terrain and a virtually total lack of navigable inland waters, Mexico has the most comprehensive domestic transportation system of any country in Latin America (see ch. 2, Physical Environment). Although both still suffer from certain deficiencies, the rail and highway systems are essentially complete in their coverage of economically important areas. Petroleum and natural gas lines serve all the major industrial centers of the country. Air transport is also well developed and there are few population centers of any consequence that are not served by licensed common carriers, scheduled or non-scheduled. Coastal shipping is of no great importance apart from the activities of the tanker fleet, and overseas trade plays a smaller role than it does in many other Latin American countries, owing to the high proportion of Mexico's foreign trade which crosses the northern border by rail or highway. The regulation of transportation, where it is not carried on directly by agencies of the federal government, falls within the province of either the Ministry of Marine or the Ministry of Communications and Transport.

While accurate figures are not available, it has been estimated that around six-tenths of domestic freight moves by highway, three-tenths by rail, and one-tenth by pipeline. The volume of air freight is relatively small. Domestic air freight has declined in recent years, with the steady expansion of the highway net, although international air freight has increased significantly, due largely to the growing importance of traffic in urgently needed industrial spare parts.

Highways

The Mexican highway system has undergone recent expansion. Between 1960 and 1967, the total extent of the Mexican road net was increased by 40 percent, and at the end of 1967, the country had around 40,200 miles of highways, almost three-fifths of which were paved and all but 10 percent surfaced (see fig. 9). Mexico now has more paved roads in proportion to its land area than any other Latin American country and, in spite of the preexistence of an extensive rail net, it is estimated that motor transport now accounts for over three-fifths of domestic freight movement. Bus service is universal and at low cost.

During 1967, 487 million pesos were spent on road maintenance and 1,364 million on new construction. Particular attention is now being devoted to opening up the underdeveloped areas of the southeast, practically the only part of the country with major economic potential which is still seriously deficient in trunk highways.

In spite of the highway expansion, a deficiency in farm-to-market roads has tended to persist, impeding the introduction of improved agricultural methods into rural areas and raising the cost of marketing local products. The states, which share responsibility for secondary and tertiary roads, are fiscally weak, and private funds have not always been available when needed. A corrective program is now under way with the help of a US$90 million loan from the Inter-American Development Bank. In its first stage, it involves the completion and reconstruction of existing access routes and, in the second, the expansion of the secondary and tertiary road system.

At the end of 1966, there were 1,248,432 motor vehicles registered in Mexico, 812,415 automobiles and 436,017 trucks and buses. Between 1960 and 1966, the number of automobiles increased 80 percent, while the total number of registered trucks and buses had risen only 36 percent. The latter figure, however, does not show the effect of a shift to heavier vehicles with the improved condition of the Mexican highways. Sales during 1966 were reported at 81,132 automobiles, 2,225 buses, and 32,548 trucks. Of the latter, 41.5 percent were up to 3 tons in gross vehicular weight; 20.2 percent were over 3 and up to 5 tons; 14.5 percent were over 5 and under 10 tons; while 23.8 percent were 10 tons and over. Sales in the last category had been only 9.1 percent of total sales in 1960.

Rail Transport

The Mexican rail system, which reached substantially its present extent in the early part of this century, is in the main an integrated net of standard gauge road. Built by a number of private enterprises, it was subsequently nationalized, but never brought under unified management. The Revolution of 1910 initiated a long period of deterioration in facilities and service, which began to be reversed only after the end of World War II. By that time, any further expansion of the system was inhibited by large operating deficits, the heavy capital outlays needed for the rehabilitation of existing facilities, and the active competition of highway transport. The total length of the system is around 14,800 miles (see fig. 8). Of the 1,059 locomotives in service in mid-1968, over 1,000 are modern diesel units; over 26,000 freight cars and around 2,000 passenger cars are presently in service.

As a result of improving the condition of the roads and of expanding and modernizing repair and terminal facilities, the volume of freight traffic increased from around 7.5 billion ton miles in 1955 to 13.5 billion ton miles in 1967. Almost all the present traffic, however, consists of agricultural staples, minerals, forest products, and heavy industrial materials. Most of the traffic in valuable industrial merchandise and perishables has been lost to highway transport, even on long hauls. In recent years, the railways have been hard put to accommodate the growing volume of heavy freight and have made little effort to recapture the traffic lost to the truckers.

The railroads have also failed to hold their share of expanding passenger traffic. While rail passenger traffic—2.64 billion passenger miles in 1967—has not actually declined, largely due to extremely low fares, it has shown no significant increase in a period when bus transportation has been growing rapidly.

At present, the rehabilitation of the Mexican rail system is entering a new phase. Administrative reforms are being undertaken by the various national railroads in accordance with a joint plan. Uniform administrative and operating standards and procedures are being adopted as a basis for integration and the first steps in the integration process are being carried out. The rehabilitation of physical equipment continues, with recent emphasis on the improvement of the telecommunications system. If the present program can be carried through successfully, improvement in the speed and reliability of service may make it possible for the railways to recapture much of the long haul traffic from the trucking business.

Rail transportation will begin a new role in Mexico with the completion in 1970 of the Mexico City subways now under construction at a cost of 858 million pesos. Designed to relieve congestion along the city's north-south axis, it will be fed by an expanded trolley bus system which will handle cross-town traffic.

Air Transport

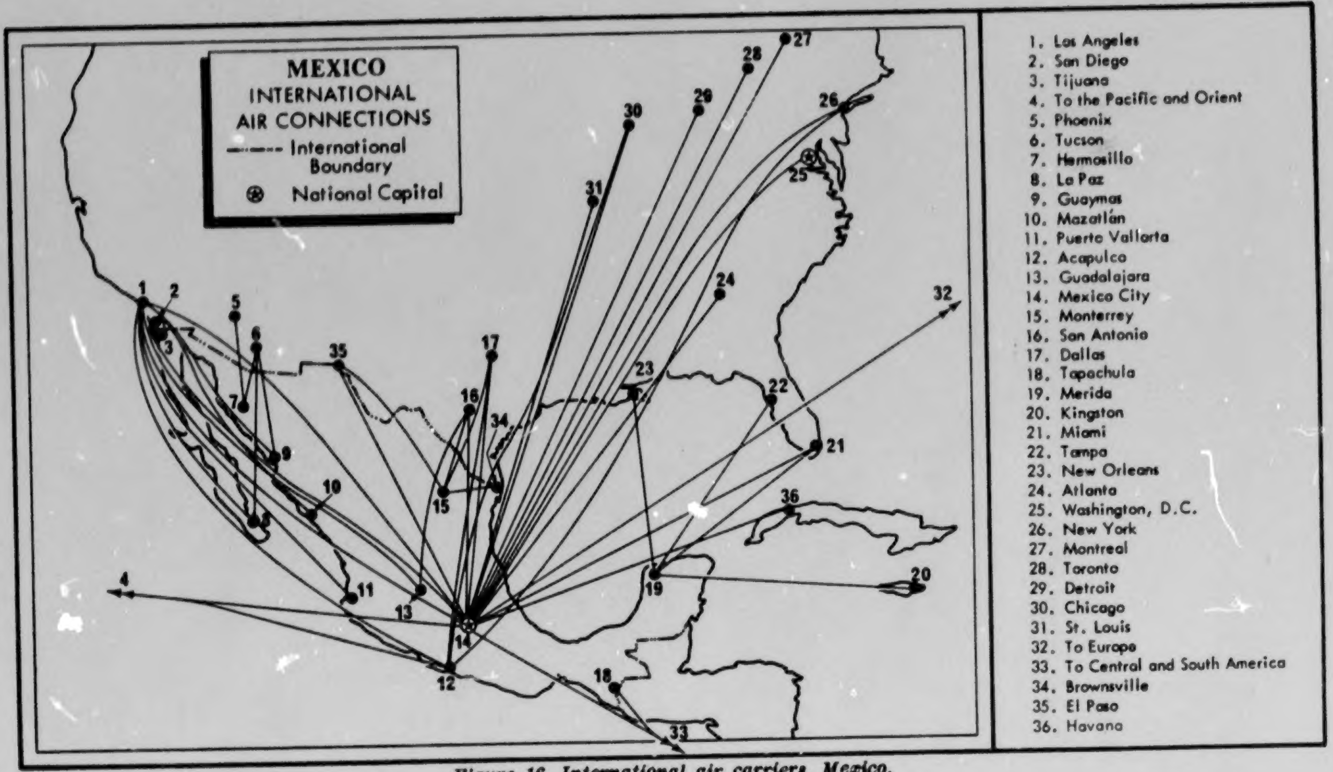
Mexico has a history of air postal service dating from 1917 and commercial aviation from the early 1920's. Today, domestic air transport is well developed, and there are few population centers of any consequence that are not served by licensed common carriers on either a scheduled or non-scheduled basis. The country is well provided with international air connections and, apart from the visitors who make brief trips by automobile across the northern border, the overwhelming majority of Mexico's many foreign tourists travel by air (see fig. 16).

All domestic common carriers operate under concessions for scheduled operations or permits for non-scheduled operations; these are issued by the Ministry of Communications and Transport. In the case of concessionaires, schedules, routes, equipment, and rates require prior approval of the Ministry. Exacting periodic inspections are carried out by a dependency of the Ministry, the Directorate General of Civil Aeronautics (DGCA), and it is reported that the Air Pilots' Union is quick to call the attention of the DGCA to operational or maintenance problems. Scheduled carriers are required to maintain adequate personal and public liability insurance. Concessions, granted for ten years, are subject to renewal.

There are nine concessionaires providing scheduled domestic service. By far the most important of these are the government-owned Aeronaves de México and the Compañía Mexicana de Aviación (called Mexicana or CMA), an affiliate of Pan American Airways. In addition to coverage of the more important domestic routes, both lines provide international service. Both have converted to jet on international flights and are in process of conversion on major domestic routes. The remaining seven concessionaires provide scheduled service mainly over secondary routes, most of which are complementary to those flown by the principal airlines. The minor scheduled carriers fly mainly DC-3's and DC-6's.

There are nearly 50 non-scheduled commercial carriers. These operate under one-year renewable permits from the Ministry of Communications and Transport. Rates and routes require prior approval. The DGCA must also be satisfied as to the condition of the equipment and there are periodic inspections. Although it is reported that considerable care is exercised in screening applicants for permits, inspections are less frequent than in the case of scheduled carriers. Non-scheduled carriers are not required to carry insurance on their passengers.

Non-scheduled air carriers have played a very significant role in Mexican transportation. Their importance, however, is diminishing, owing to the steady extension of the highway network.


MEXICO
INTERNATIONAL
AIR CONNECTIONS
International Boundary
⊛ National Capital
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1. Los Angeles
2. San Diego
3. Tijuana
4. To the Pacific and Orient
5. Phoenix
6. Tucson
7. Hermosillo
8. La Paz
9. Guaymas
10. Mazatlán
11. Puerto Vallarta
12. Acapulco
13. Guadalajara
14. Mexico City
15. Monterrey
16. San Antonio
17. Dallas
18. Tapachula
19. Merida
20. Kingston
21. Miami
22. Tampa
23. New Orleans
24. Atlanta
25. Washington, D.C.
26. New York
27. Montreal
28. Toronto
29. Detroit
30. Chicago
31. St. Louis
32. To Europe
33. To Central and South America
34. Brownsville
35. El Paso
36. Havana

Figure 16. International air carriers, Mexico.

Apart from the international service provided by domestic carriers, a large number of foreign airlines furnish regular international service, including American Airlines, Western Airlines, Pan American Air West, Varig and Air France. Although some of their flights touch more than once in Mexico, they may not carry passengers or freight solely from one domestic point to another, and their traffic is restricted to international arrivals and departures.

Between 1960 and 1966, while the number of passengers carried by national airlines almost doubled, rising from 1.07 million to 2.06 million, the number of passenger miles flown rose less than 24 percent to a total of 1,275 million. In the same period, the number of passengers carried by the international airlines rose from 711,000 to 955,000. Although ton mileage figures are not available, the weight of air freight carried by domestic airlines declined from 31,658 to 25,930 metric tons, while international air freight increased from 10,502 to 19,517 metric tons.

A semi-autonomous organization, Aeropuertos y Servicios Auxiliares, operates airports for the government and an increasing number of the more important fields are being brought under federal control. In 1967 and 1968, a major program of expansion and new construction was under way, involving 75 localities. Another semi-public organization is in charge of aeronautical telecommunications and meteorological services, air traffic control, and navigational aids. Great progress is being made in this field, particularly in expanding the coverage of high-frequency omnidirectional facilities (VOR). By 1970, it is anticipated that air traffic control will be complete throughout the Republic, provided by three new control centers linked by micro-wave network.

Pipelines

Pipeline transportation has, since the end of World War II, come to play an increasingly important role in the Mexican economy. Mexico's mineral hydrocarbons are the predominant source of power not only for transportation but for industry as well. From the three major producing areas in northern Tamaulipas, northern Veracruz, and Tabasco, there extend two pipeline systems which supply both petroleum products and natural gas to the country's major industrial areas (see fig. 7).

In the north, both gas and product lines extend west through Monterrey and Torreón and thence northwest to Chihuahua, with a branch gas line running from Monterrey to Monclova. The northern distribution system is supplied with gas from the Reynosa field just south of the U.S. border, and petroleum products are piped from the refinery at Tampico.

In the central zone, a number of lines from the oilfields of northern Veracruz supply crude oil to refineries in the Federal District and Salamanca. A complex of product lines radiates from the Salamanca refinery to supply Guadalajara and other major population centers west of the Capital. Gas is supplied to the central zone both from the Veracruz and Tabasco fields.

In the southeast, petroleum product and ammonia lines cross the Isthmus of Tehuantepec from the Minatitlán refinery complex, supplying the west coast tanker fleet out of the port of Salina Cruz.

At the end of 1966, total length of the pipeline system as a whole was around 8,000 miles. Of this total, approximately 3,300 miles were natural gas lines, 2,100 miles petroleum product lines, and 2,400 miles crude oil pipeline—figures which represented increases of 87 percent, 72 percent, and 23 percent respectively, as compared with 1960. In the same 6-year period, the length of the system as a whole had increased by around 58 percent.

Maritime Transport

Increasing attention is being given to the need to develop a national merchant marine, partly because of the growing trade with the Latin American Free Trade Area, which is for the most part ill-served by the routes and schedules of foreign carriers. At the end of 1967, however, there were still only 556,000 tons under Mexican registry, around 64 percent ocean going—mainly tankers operated by the national petroleum monopoly.

Port conditions in Mexico are generally unsatisfactory. Although the country is not well endowed with strategically located natural harbors, present difficulties are largely administrative in origin. There is no effective coordination of port activities under central authorities. Unions occupy a privileged position.

In spite of these difficulties, Mexico's maritime trade has grown rapidly in recent years, reflecting the general expansion of the economy. Although there are apparent inconsistencies in the available figures on Mexican port operations, the total volume of freight reported as moving through Mexican ports increased, between 1960 and 1966, from 14 to 25 million metric tons. Of the latter total, around half was coasting traffic, mainly in petroleum products. Over 85 percent of the tonnage in overseas trade was embarked from Mexican ports, mainly mineral products such as sulfur from Coatzacoalcos, ore concentrates and petroleum products from Tampico, salt from Venustiana Carranza (Guerrero Negro), and copper ores from Santa Rosalía. Most of the general overseas cargo passes through the ports of Veracruz and Tampico which serve both import and export requirements of the central and northern industrial zones.

Storage and Materials Handling

Although Mexico still suffers from a lack of sufficient modern storage and materials handling facilities, great progress has been made in recent years. This has been particularly notable in the case of foodgrains, where losses from improper storage were once extremely high. Improved rural storage has been largely due to the activities of the government through CONASUPO, which buys, stores, and sells staple foods with a view to reducing the spread between producer and consumer prices, and the National Deposit Warehouses, which operate public rural storage facilities. At mid-1968, there were government warehouses in 294 locations, with total capacity of 3.7 million metric tons.

A new program for the expansion of rural storage through cooperative warehouses was completed in 1968. With government-financed materials and local labor, storage facilities with a total capacity of 530,000 metric tons were built in 357 producing areas and 1,500 people were trained in their management and operation. At these depots, grain can be received from local producers, graded, and paid for immediately. To accommodate Sonora's growing export trade in wheat, grain elevators with storage capacity of 65,000 metric tons and loading capacity of 1,000 tons an hour have recently been completed in the port of Guaymas.

The failure to rationalize materials handling is not limited to the ports. Costly manual handling of materials frequently persists in conjunction with relatively advanced mechanized production methods. There is a considerable tendency in Mexico to misjudge the marginal rate of substitution between capital and labor. Apart from this, many plants are not laid out to permit the uninterrupted and direct flow of goods in process, and many large mercantile warehouses are not organized to permit efficient stock picking.

Lack of widely distributed refrigerated storage and transportation facilities and adequately equipped long range fishing craft continues to impede the development of the domestic market for fish and perishable agricultural products. A similar situation has prevailed with respect to the export trade in perishables, although this handicap is being gradually overcome. Improved facilities now exist in major centers for the export production of shrimp and winter vegetables.

CHAPTER 23

FOREIGN ECONOMIC RELATIONS

The foreign sector of Mexico's economy is among the best indicators of the extent of growth and development that has taken place in the country since 1910. In 1900, over 80 percent of Mexico's exports were gold, silver, and other minerals. Today, agricultural, cattle, and industrial products predominate, and minerals account for only about 15 percent. Before the Revolution, less than 20 percent of Mexico's exports were consumer goods; by 1967, this proportion exceeded 50 percent. Mexico has rapidly begun to increase its earnings from processed and manufactured exports, and Mexico has expanded and diversified her export list so that fluctuations in the price of one or two items will not significantly effect the country's balance of payments position.

Two of the most important sources of foreign earnings have been the growing tourist industry and the border trade with the United States. Mexico has made a conscious and effective effort to cater to these sources of development funds, especially for use in developing the northern portion of the country.

Since 1940 imports have exceeded exports so as to cause an unfavorable balance of trade but not in sufficient amounts as to cause balance of payments problems (see table 36). The import items, however, have changed drastically since 1910; the demand is far less oriented toward consumer goods than toward production goods. In the process, Mexico has generally succeeded in substituting domestically produced goods for former import items and, thus, in allowing the country to concentrate the expenditure of foreign exchange earnings on capital goods, rather than on foodstuffs, in which it is now virtually self-sufficient.

Much of the success in maintaining a relatively favorable balance of payments position can be explained not only by the rapid growth in tourism and border trade but also by the increased inflow of foreign capital to the country. While growth in amortization payments has recently caused some disquietude, the rate of growth in the Mexican economy, coupled with the growth in capital inflow due to confidence in the stability of the economy, has generally meant that debt servicing has not been sufficiently large enough to counteract the favorable balance of payments position of Mexico (see ch. 25, Banking and Currency).

Table 36. Mexican Balance of Payments with All Countries in Selected Years, 1939–1967

[In Millions of U.S. dollars]

	1939–1950 [1]	1951–1960 [2]	1961	1963	1965	1967(p)
I. BALANCE ON CURRENT ACCOUNT (A+B)	−42.0	−160.5	−220.5	−206.1	−360.0	−514.5
A. Balance of trade	−75.0	−293.2	−334.1	−303.8	−445.7	−644.5
1. Exports (f.o.b.)	305.0	681.4	803.5	935.9	1,113.9	1,103.8
2. Imports (c.i.f.)	−380.0	−974.6	−1,138.6	−1,239.7	−1,559.6	−1,748.3
B. Balance on service account	33.0	132.7	113.6	97.7	85.7	130.0
3. Production of gold and silver [3]	n.a.	40.3	40.8	51.3	44.3	51.7
4. Tourism from the outside	[4] 74.0	124.6	164.0	210.6	277.6	363.1
5. Tourism to the outside [3]	[4] −9.0	−20.6	−45.5	−84.3	−119.3	−162.6
6. Border transactions, income		265.9	392.7	445.9	504.5	594.6
7. Border transactions, outgo		−169.3	−242.0	−265.2	−294.3	−363.7
8. Personal remittances	22.0	33.6	34.1	30.8	12.0	12.9
9. Payments on direct foreign investment	−55.0	−106.7	−148.1	−185.6	−234.9	−216.5
10. Interest Payments on official debt		−15.3	−35.1	−54.5	−62.2	−117.5
11. Other income	6.0	25.7	28.2	34.8	42.0	72.3
12. Other outgo	−5.0	−45.5	−74.5	−86.1	−84.1	−104.3
II. BALANCE ON CAPITAL ACCOUNT (C+D)	25.0	139.3	288.0	243.7	150.8	460.0
C. Long-term capital	27.0	127.3	285.5	301.4	180.6	315.3
13. Direct foreign investment	n.a.	[5] 83.0	119.3	117.4	197.6	68.0

a) Reinvestment	n.a.	22. 7	25. 2	36. 0	73. 5	n.a.
b) New investment	n.a.	66. 1	81. 8	76. 9	110. 1	n.a.
c) Inter-company accounts	n.a.	5. 9	12. 3	4. 5	14. 1	n.a.
14. Securities operations (net)	n.a.	−9. 3	−7. 4	−6. 3	11. 9	54. 7
15. Credits to NAFINSA [6] and others (net)	n.a.	71. 9	185. 3	155. 0	−51. 3	243. 2
a) Gross	n.a.	141. 6	357. 3	385. 6	344. 2	681. 5
b) Amortization	n.a.	−69. 7	−172. 0	−230. 6	−395. 5	−438. 4
16. Government debt (net)	n.a.	−18. 3	−11. 7	−14. 5	22. 3	13. 8
D. Short-term debt	−2. 0	12. 0	2. 5	−57. 7	−29. 8	−4. 0
17. Individuals and companies (net)	n.a.	−12. 6	−27. 7	−34. 3	−12. 5	n.a.
a) Assets	n.a.	−16. 6	−51. 8	−58. 9	−51. 2	n.a.
b) Liabilities	n.a.	4. 0	24. 1	24. 6	38. 7	n.a.
18. Private and national banks (net)	n.a.	24. 6	30. 2	−23. 4	−17. 4	n.a.
a) Assets	n.a.	1. 0	−24. 5	−56. 1	−6. 2	n.a.
b) Liabilities	n.a.	23. 6	54. 7	32. 7	−11. 2	n.a.
III. ERRORS AND OMISSIONS (net)	36. 0	33. 5	−89. 0	72. 1	188. 3	42. 8
IV. VARIATIONS IN THE OFFICIAL RESERVES OF THE BANK OF MEXICO	+20. 0	+12. 3	−21. 5	109. 7	−20. 9	39. 8

(p) Preliminary.

[1] Average.

[2] Minus gold and silver used in the country for industrial purposes.

[3] Includes expenses of students abroad.

[4] Includes relevant border transactions.

[5] Includes 1960 purchase of foreign electricity companies, counted as "investment retired."

[6] Nacional Financiera, S.A.

Sources: Adapted from 1939–50, Wm. O. Freithaler, *Mexico's Foreign Trade and Economic Development*, p. 42; 1951–60, Nacional Financiera, *Statistics on the Mexican Economy*, pp. 197–202; 1961, 1963, 1965, Banco de México, *Informe Anual*.

With the ratios of merchandise exports and imports to the gross national product at only 5.0 and 7.9 percent, respectively, in 1967 and only 3 percent of the labor force devoted to international trade, the external economic activities of Mexico have contributed greatly to the growth of the economy since World War II. These activities stimulate commerce and industry, as opposed to subsistence farming; they have aided in the development of the north, via tourism and border trade; and capital inflows and commodity imports into strategic areas of the economy contribute to the growth of the national product.

FOREIGN TRADE PATTERNS

If one excludes exports of gold and silver and the amount attributable to border trade, one finds that Mexico has consistently run a balance of trade deficit over the last 60 years. While total trade has grown rapidly, exports as a percentage of imports have been practically constant, 72.4 percent in 1966 as compared with 72.5 percent in 1910. Moreover, the relative annual rates of increase of imports and exports have tended to be similar; the ratio of exports to imports has tended to remain near 73 percent (plus or minus 5 percent) in any given year.

The types of products involved in the trade deficit have changed. In 1910 the trade balance deficit was produced essentially by an excess of consumer goods imports over consumer goods exports, whereas in 1967 the deficit was produced by an excess of production goods imports over production goods exports. This shift reflects the demands induced by rapid economic development and the process of import substitution. Particularly with regard to processed food and drink, the consumer goods trade deficit has been converted to a large and growing surplus—aiding Mexico's capacity to purchase investment goods. The small 1910 surplus in trade of production goods was quickly converted into a large deficit, stemming from the rapid growth in imports of processed raw materials and of investment goods. Mexico's trade balance deficit thus reflects attempts to attain a more balanced and more highly industrialized economy.

Exports

Mexico's capacity to generate foreign exchange earnings through exports has expanded rapidly since 1910, particularly after 1940. Only in the late 1950's was there a somewhat prolonged period of relative stagnation, a consequence of the Korean War period. The growth in total exports has generally been steady since 1940, a rate of growth surpassed by few other countries, especially since 1960 (see table 37).

Unlike many developing nations, Mexico has been able to diversify its export base. This reduces the risk of payment crises stemming from the fall in the world price of one or two commodities. This diversification is a consequence of the rapid rise in the importance of agricul-

Table 37. Mexican Exports of Goods, 1910, 1959, and 1967

	Millions of U.S. dollars			Percent		
	1910	1959	1967	1910	1959	1967
I. CONSUMER GOODS	13. 3	266. 3	564. 2	17. 6	36. 8	51. 1
A. Nondurable	12. 9	250. 0	535. 8	17. 1	34. 6	48. 5
1. Foods & drinks	12. 6	232. 8	491. 4	16. 7	32. 2	44. 5
a) Unprocessed	12. 1	202. 3	377. 4	16. 1	28. 0	34. 2
b) Processed	0. 5	30. 5	114. 0	0. 6	4. 2	10. 3
2. Nonedible	0. 3	17. 2	44. 4	0. 4	2. 4	4. 0
a) Unprocessed		0. 4	0. 7		0. 1	0. 1
b) Processed	0. 3	16. 8	43. 7	0. 4	2. 3	3. 9
B. Durable	0. 4	16. 3	28. 4	0. 5	2. 2	2. 6
II. PRODUCTION GOODS	62. 1	456. 7	539. 6	82. 4	63. 2	49. 9
A. Nondurable (raw materials & accessories)	61. 7	441. 5	475. 4	81. 9	61. 0	43. 1
1. Unprocessed	46. 5	300. 0	319. 7	61. 7	41. 5	29. 0
2. Processed	15. 2	141. 5	155. 7	20. 2	19. 5	14. 1
B. Durable	0. 4	15. 2	64. 1	0. 5	2. 2	6. 8
Total	75. 4	723. 0	1, 103. 8	100. 0	100. 0	100. 0

Source: Adapted from Banco Nacional de México, *Review of the Economic Situation of Mexico*, p. 9; Colegio de México, *Comercio Exterior de México, 1877–1911; Revista de Estadística*, 1959–60, 1966–67.

tural products. Agricultural products now account for some 40 percen of total exports; if manufactured food items were added to this category, this would account for approximately one-half Mexico's exports Only cotton, however, amounts to more than 10 percent of the tota exports, and there are clear signs that its relative weight may well fal below that figure by 1970. Of the other items, sugar, coffee, and cor occasionally exceed 5 percent of total exports.

The rise in the relative importance of agricultural exports has bee at the expense of certain mineral exports, particularly copper, lead and zinc, although, in a more common accounting procedure, gold an silver would also have to be included. Petroleum, sulphur, and sal have now replaced these metals as Mexico's most important minera exports. An offshoot of this latter trend is a very rapid expansion o chemical exports.

Manufactured goods have experienced the most rapid growth o any export category, rising from just over 2 percent of total exports i 1910 to nearly 20 percent in the mid-1960's. This is observable especiall in the growth in processed and durable goods exports between 191 and 1967. The total of these items grew from 2.0 percent in 1910 t 23.6 percent in 1967 as a proportion of total exports. These manufactured exports reflect an economy whose comparative advantage stil lies in selling commodities based on primary products, foodstuff (particularly sugar), chemicals, and textiles account for three-quarter of this category. However, such items as synthetic hormones, books electrical equipment, machinery parts, and specialty industrial products are becoming increasingly important in Mexico's internationa sales. The recent development of these exports underscores the growing diversification of Mexico's export base and the development of th country's industrial base.

From 1945 until 1960 cotton accounted for some 25 percent of th country's total merchandise export earnings, placing Mexico secon to the United States in total shipments to world markets (see ch. 19 Agriculture). This growth and development was stimulated by hig world prices for cotton, a consequence of the reduced exportable suppl by the United States.

The expansion of the cotton export industry has contributed to th development of the Mexican economy in two ways. It has shifte Mexican agriculture away from subsistence farming and into large scale commercial agriculture, and it has helped Mexico move away from her extreme geographic dependence on the U.S. market.

Declining world prices during the 1960's have tended to reduc cotton's importance in the total picture of Mexican exports. Recently some cotton land has been replanted with wheat, formerly a major import item, but now an export item of potential importance if worl demand increases.

Coffee has been an important Mexican export throughout the 20th entury. By the mid-1950's Mexico's coffee earnings reached their all ime high levels, only to be drastically reduced by the expansion of African production. In 1958 Mexico became a party to a set of global xport agreements and the initial response to these agreements was a teep rise of Mexican coffee earnings, followed, however, by an equally apid decline.

Although Mexico has produced sugar since the time of the Spanish Conquest, it was a net importer until the Korean War. Mexico's ability o produce sugar developed when other sugar-producing nations greed to control supply and thus maintain stability in the international price. Mexico then tried to enlarge its quota with the United States whose internal sugar price is usually higher than the international price. Mexican pleas for increased quotas were to no avail until he Cuban crisis of 1959–60. In that period, Mexico's U.S. allotment was quadrupled, so that until recently virtually all of Mexico's sugar xports have gone to the United States.

The three commodities mentioned above, cotton, coffee and sugar, ave accounted for 30 percent or more of Mexico's export earnings since about 1950, falling off in 1964–1965 to less than a quarter of the xport returns. Fruits and vegetables grown specifically to supplement U.S. domestic supplies have become prominent in recent years, accounting now for more than 5 percent of total exports. Most important n this group are tomatoes, strawberries, watermelons, cantaloupes, and citrus fruits. These products seem likely to grow in importance and earning power.

Two other products of apparently growing export importance are pineapples and honey. Mexico is now the fourth largest producer of honey in the world. But perhaps the most striking development in Mexico's agricultural exports is wheat and corn. The international sale of these products, introduced in the mid-1960's, indicate the degree to which Mexico has attained self-sufficiency in the production of basic foodstuffs.

Mexico earns approximately 10 percent of its foreign exchange through sales of fish and meat. The most important item in this category is shrimp, accounting for roughly 90 percent of the export earnings in fish. Shrimp sales are largely a postwar phenomenon, stemming from the development of the process of quick-freezing fresh foods and the more than doubling of consumption of shrimp in the United States between 1939 and 1955. Mexico now accounts for a little less than half the U.S. imports of shrimp, which in turn account for a little more than half the total United States supply of shrimp.

Meat exports have suffered from three serious handicaps: occasional widespread epidemics of hoof-and-mouth disease; the absence of modern breeding, feeding, and marketing techniques; and an export quota system which as recently as 1966 was strengthened in order to assure an increased domestic supply of cattle. Nevertheless, since 1960 attitudes on the part of cattlemen as well as the government have caused many improvements. Most clearly seen are the sizeable imports of breeding stock from the United States, the development of registered herds of purebred cattle, and the institution of updated inspection and grading techniques. These improvements may well mean increased future importance for meat exports.

As a country which over the centuries was noted for its mineral wealth, Mexico now depends very little on this wealth for export earnings. Whereas at the turn of the century over 80 percent of Mexico's exports were gold, silver, and other minerals, today only about 20 percent of total export earnings is derived from minerals, of which the majority is claimed not by metals but by such commodities as salt, sulphur, and petroleum. This change is reflected in the fact that the mining sector of the Mexican economy has expanded less rapidly than any other major sector since 1940. Metals have contributed disproportionately to this decline, with production of gold, copper, and lead in particular tending to decline absolutely in volume since the 1950's.

There are several reasons for the decline in development of copper, lead, and zinc exports. First, while world consumption of these metals has increased substantially since World War II, the total value of trade in them has been extremely sensitive to shifts in demand in the industrialized nations. World market prices for copper, lead, and zinc began to deteriorate in the early 1950's. For Mexico, the effects of this weakening in international prices were compounded by reduced purchases by the United States, by the reimposition of United States copper duties, and by the United States establishment of import quotas on lead and zinc. Special tax concessions given by the Mexican government to foreign investors to so-called "necessary" manufacturing industries are not given to such investors in the mining industry. Heavy Mexican export duties are imposed on metal exports with differentially higher rates on unprocessed materials. This tends to offset advantages where industrialized nations have put differentially higher import duties on processed as opposed to unprocessed raw materials. The total effect is that the foreign exchange earnings from exports of copper, lead, and zinc in 1967 accounted for less than 4 percent of Mexico's total merchandise exports, while in 1955 they accounted for about 20 percent.

Mexico's sulphur production has risen to the point where the country is the world's second leading sulphur producer, behind only the United States. This rapid rise was the direct result of Export-Import Bank loans to two United States-controlled companies which discovered large reserves of elemental sulphur in the Isthmus of Tehuantepec, one of the least developed regions in Mexico. The foreign-owned companies, since their Mexicanization, have expanded production so rapidly that the Mexican government has found it necessary to limit exports in any one year to 10 percent of proven reserves in the same year, in an attempt to assure future domestic supplies for agricultural and industrial purposes.

Impetus for the development of the Mexican salt industry was almost wholly external, occurring primarily after 1960, during a period when world consumption was on the rise while domestic consumption was declining in Mexico. Thus, nearly 90 percent of the salt produced in Mexico is exported and the commodity is rapidly becoming one of the country's primary foreign exchange earners, the major purchasers being Japan, the United States, and Canada.

While petroleum and natural gas are major mineral exports of Mexico, these products may not long stay on the export list. As recently as 1965, the director of the government oil monopoly Petróleos Mexicanos (PEMEX) reported great difficulty in staying abreast of the rapidly increasing domestic consumption of petroleum products.

The major exports discussed above have typically accounted for 60 percent or more of Mexico's merchandise export earnings. In 1959 Mexico's 11 most important exports accounted for about 62 percent of total export earnings (see table 37). Today, although the 11 products on the list have changed in two cases (from copper and meat to corn and salt), that list now accounts for only about half the total export earnings and appears to be declining. By 1967, it took 16 products to account for the same 62 percent of Mexico's total merchandise export earnings. The extent of the diversification of Mexico's export earnings means that, unlike the case with most developing countries, Mexico's balance of payments problems will most probably not come from fluctuations in the world price of one or two commodities.

Imports

The size of merchandise imports relative to gross national product has fallen from 12.7 percent in 1955 to 7.9 percent in 1967. The fact that Mexico has been able to check the rate of growth of imports without adversely affecting the rate of growth of the gross nation product is attributable in part to a successful program of import substitution (see table 38).

The most dramatic shift in imports has occurred in the area of consumer durable and nondurable goods. Whereas consumer goods had accounted for some 44 percent of the items imported into Mexico in 1910, by 1967 they accounted for less than 17 percent. All of this change has come about through increased domestic production of nondurable consumer goods, particularly foodstuffs, wearing apparel, and pharmaceuticals. While as a category, consumer durables have changed relatively little, the composition of this category has changed

Table 38. *Mexican Imports of Goods, 1910, 1959, and 1967*

	Millions of U.S. dollars			Percent		
	1910	1959	1967	1910	1959	1967
I. CONSUMER GOODS	45. 6	193. 4	285. 8	44. 0	19. 4	16. 3
A. Nondurable	34. 1	65. 4	94. 4	32. 8	6. 6	5. 4
1. Food & Drinks	15. 0	32. 0	42. 3	14. 8	3. 2	2. 4
a) Unprocessed	8. 3	17. 3	10. 3	8. 3	1. 7	0. 6
b) Processed	6. 7	14. 7	32. 0	6. 5	1. 5	1. 8
2. Nonedible	19. 1	33. 4	52. 8	18. 0	3. 4	3. 0
B. Durable	11. 5	128. 0	191. 4	11. 2	12. 8	10. 9
II. PRODUCTION GOODS	58. 4	813. 2	1, 462. 5	56. 0	80. 6	83. 7
A. Nondurable (raw materials & accessories)	27. 3	368. 0	586. 4	26. 3	36. 4	33. 5
1. Unprocessed	6. 7	50. 6	76. 3	6. 5	5. 0	4. 3
2. Processed	20. 6	317. 4	510. 1	19. 8	31. 4	29. 2
B. Durable (investment goods)	31. 1	445. 2	876. 1	29. 7	44. 2	50. 2
Total	104. 0	1, 006. 7	1, 748. 3	100. 0	100. 0	100. 0

Source: Adapted from Banco Nacional de México, *Review of the Economic Situation of Mexico*, p. 9; Colegio de México, *Comercio Exterior de México, 1877–1911*; *Revista de Estadística*, 1959–60, 1966–67.

considerably. For instance, instead of importing whole automobiles, there is a growing tendency to import parts and assemble them at plants in Mexico. Moreover, electrical appliances are now being built domestically. Much of the consumer durables imports are now made up of automobiles and automotive parts.

In 1964 an automotive integration decree provided that Mexican producers of vehicles must achieve an integrated production level of 60 percent or better national content by value.

Production goods, on the other hand, make up more than 80 percent of imports as compared to under 60 percent in 1910. This, of course, is the mark of a country consciously trying to expand and diversify its economy. There has been some expansion in the proportion of processed raw materials imported. Rapid expansion of the petroleum and coal industries have curtailed the imports of crude petroleum and cooking coal, and it is now such items as wool and forage products which account for unprocessed raw materials imports. In contrast, processed materials have increased from about 20 percent of imports in 1910 to some 30 percent in 1967. Major items here are scrap and ingot steel, iron, chemical fertilizers, resins, newsprint, and rubber. The increase in this category would likely have been greater had not domestic cement and pig iron production increased more than ten-fold and steel ingot production nearly twenty-fold since 1940. Not surprisingly, however, it is producer durables which have expanded most rapidly, growing from just under 30 percent of total merchandise imports in 1910 to over 50 percent in 1967. In this category, machinery, industrial equipment, tractors, telephone and telegraph equipment, earth-moving equipment, and the like have produced the major portion of the expenditures. This heavy importation of capital equipment clearly indicates the degree to which the Mexican economy has developed.

Direction of Trade

Since 1910, Mexico has experienced shifts in the direction of her international trade—changes interrupted and perhaps slowed by World War II and the Korean War (see table 39). The United States and Europe together controlled almost all trade with Mexico in 1910–11—accounting for nearly 98 percent of the exports and 97 percent of the imports of the country. By 1967, these two areas had become less important.

Prior to World War II, there were signs of a growing diversification of markets for Mexican exports. In 1910–11 the United States purchased 76.1 percent of Mexico's exports, but by 1935 this proportion had dropped to just over 61 percent. At the same time, Europe's share in the export total rose from 21.5 to 28.4 percent, while, even more importantly, that of Canada and Latin America had risen from a small 1.2 percent to nearly 8 percent. These trends were radically reversed

Table 39. Direction of Mexico's Trade, 1910–1911 and 1967
[percent]

	EXPORTS		IMPORTS	
	1910–11	1967	1910–11	1967
United States	*76.4*	*62.9*	*55.0*	*62*
Canada	0.6	0.8	0.4	2
Latin America (except Cuba)	0.6	9.5	0.9	3
Latin American Free Trade Assoc.[1] (except Venezuela)	0.0	4.9	0.6	2
Rest of Latin America	0.6	4.6	0.3	0
Western Europe	*21.5*	*16.4*	*41.9*	*25*
European Economic Community[2]	8.8	9.6	25.1	15
European Free Trade Area[3]	12.2	5.9	12.5	8
Other	0.5	0.9	4.3	1
Communist countries in Europe	0.0	0.3	0.1	0
Japan	0.0	7.0	0.2	4
Other countries	0.9	3.1	1.5	1
Total	100.0	100.0	100.0	100

[1] Argentina, Brazil, Colombia, Chile, Ecuador, Paraguay, Peru, and Uruguay.

[2] Belgium, France, Italy, Luxembourg, The Netherlands, and West Germany. Data for 1910–11 is for same countries with the exception that it includes all of Germany, not just West Germany alone.

[3] Austria, Denmark, Norway, Portugal, Sweden, Switzerland, and the United Kingdom.

Source: Adapted from *Comercio Exterior de México, 1877–1911*; *Revista Estadística*, Febrero, 1968.

by World War II, which closed off the European market to Mexic In this period, the United States was accounted for practically percent of total Mexican exports and Latin America's share in t market accounted for almost all the rest.

By 1967, the United States' share had fallen back to near its 19 level, and the European portion had grown back steadily, achievi some 16.7 percent of the total market for Mexican exports—a figu still below its 1911 share, however. The Latin American and Canadia proportion in Mexico's exports fell off sharply after the war, mai taining a generally steady 6 percent of the market through the deca of the 1950's. The founding of the Latin American Free Trade Ass ciation (LAFTA) on June 1, 1961, gave new impetus to this mark bringing its share in 1967 to 11.2 percent of total exports. The mo striking post-war shifts, however, came in the markets outside Europe and the Western Hemisphere. Whereas before 1950 the d mand for Mexican exports in Asia, Africa, and Oceania had nev amounted to much more than 3 percent of such total, by 1967 it h reached nearly 10 percent. The major growth in this area came fir from Japan, which in 1967 accounted for 7 percent of Mexican expor and then Australia, whose share began to rise sharply in the ear 1960's.

The shifts in and diversification of the import markets of Mexico have been far less pronounced than those in the export markets. In 1911, the United States was providing some 55 percent of Mexican imports, while Europe was supplying 42 percent. The advent of the Revolution and then World War II saw the United States share rise and the European share fall. By 1945 the United States was supplying 82.7 percent of Mexico's imports while the European share was less than 5 percent. Since then, these trends have been somewhat reversed. The United States share by 1967 accounted for just under 63 percent and the European share for 25.8 percent. Discounting the distortions wrought by World War II, the Latin American proportion of the Mexican import market never accounted for much more than 1 percent of the total imports supplied.

The founding of LAFTA spurred the growth of Mexican demand for other Latin American products. Moreover, as Mexican economic development became broader based during the early 1960's, the demand for imports from other economically advanced countries, particularly from Japan, Canada, and Australia, began to increase. Thus, in 1950 imports from countries outside of Europe and the United States amounted to little more than 5 percent of such total, whereas in 1967 they exceeded 11 percent of total Mexican imports. This latter trend appears to be accelerating, for almost all of the change has occurred since 1960.

United States

Although the percentage of the United States share of the Mexican export market has fallen since World War II, the absolute value of United States purchases has risen steadily over the period. Well over half of U.S. imports from Mexico are consumer goods, and of these more than 95 percent are food and drink. Nearly half of the latter is accounted for by five products: coffee, sugar, shrimp, tomatoes, and meat products. Fruits, other fish products, beer, and tequila make up the majority of rest of the food and drink category unaccounted for by the five primary products. Of the less than 5 percent of consumer goods exported to the United States in the form of consumer durables, some 40 percent is accounted for by glass, furniture, and jewelry. Of the approximately 45 percent of Mexican exports to the United States accounted for by production goods, more than half are unprocessed raw materials, of which cotton, zinc, crude petroleum, and sulphur are most important. Refined lead, binder twine, gasoline, cooper, laminated steel, and natural gas make up some two-thirds of the value of the processed raw materials. United States imports of Mexican capital goods are quite small, amounting to little more than 5 percent of her imports from that country.

Since the early 1950's the United States share of total Mexican imports has fallen from some 85 percent to less than 63 percent by 1967, largely replaced by European and Japanese products. Yet, the United States is still far and away the predominant source of Mexico's imports. Approximately half of these imports are of machinery and transportation equipment, of which industrial machinery alone accounts for about 20 percent of total imports from the United States. Manufactured goods, such as paper and paperboard, scientific instruments, iron and steel, and metal containers, account for another sixth. Chemicals, crude materials, and mineral fuels, and lubricants make up most of the rest of these imports. The pattern of these imports is one that emphasizes producers goods, and is consistent with Mexico's push toward a more diversified economy.

Europe

While Europe is relatively less important in Mexico's international trade than it was prior to the Revolution, since World War II it has increased its trade with Mexico to the point that Europe has renewed its highly competitive position vis-à-vis the United States. The countries of the European Common Market, particularly West Germany and France, carry on the largest portion of the trade between Mexico and Europe. These countries are followed by the European Free Trade Association (EFTA) and certain other countries outside of the special trading groups, especially Spain. Trade with Communist countries has expanded very rapidly during the 1960's, but it is still very small, probably amounting to less than 1 percent of total Mexican foreign trade.

European countries typically import a limited number of Mexican commodities or products. In terms of consumer items, most European countries import Mexican coffee and honey. France purchases processed sugar and Switzerland imports wheat. Mexico exports unprocessed cotton and sulphur to most European nations and zinc, lead, and copper to many of them. Many northern European countries, West Germany in particular, also import large quantities of natural and synthetic hormones from Mexico.

In return, Mexico imports a major portion of its capital stock and its manufactured items from Europe. All major Western European nations supply substantial amounts of machinery to Mexico, either installed or in parts. Among the specific imports from Europe, telephone equipment is supplied by West Germany and Belgium; hand tools, by West Germany and Great Britain; electrical transformers, by France and Italy; turbines, by Switzerland; calculating machinery, by Italy and Switzerland; tractors, by Great Britain; and, automobiles and automotive parts by West Germany, France, Italy, and Great Britain. In addition, large quantities of insecticides are provided by West Germany, fertilizers by West Germany and Belgium, resins by West Germany, photographic film by Belgium, antibiotics by Italy, and pigments and anilenes by Great Britain and Switzerland. Again, as was the case with the United States, Mexico's imports from Europe tend to be heavily weighted towards producers' goods.

Latin America

Until after the founding of LAFTA in 1961, Mexico's trade with Latin America amounted to less than 4 percent of the country's total trade. Her trade with the region, and particularly with her main trading partners, Argentina, Brazil, Chile, Colombia, and Peru, has risen sharply in recent years. Mexico now has a highly favorable balance of trade with the region. Latin America is rapidly becoming one of Mexico's major export areas—and, not of primary products, but of manufactured items. In this regard, Mexico has become the predominant Latin American producer of manufactures exported to other Latin American countries, such that almost two-thirds of her exports going to LAFTA countries, for example, are processed and manufactured commodities. The principal exports are chemicals, metal and metal products, books, machinery, and textiles. In terms of semiprocessed items, resins and tars have been important exports, particularly to Argentina, Chile, and Brazil. In return, Mexico's still relatively small purchases of imports from Latin America concentrate on primary products.

Other Countries

Australia, Canada, and Japan are three other countries, of importance to the Mexican economy. The Australian and Japanese markets have grown up almost entirely since the mid-1950's. Mexico's major exports to Canada are fluorite, salt, peanuts, and coffee. Her major imports are railroad equipment, newsprint, cellulose acetate, asbestos, installed machinery, and automobiles. More than 80 percent of Mexico's exports to Japan are accounted for by cotton and another 15 percent or so by common salt. Of the other exports, only coffee and zinc are of any real importance. Japan's list of exports to Mexico is lengthy and made up of a highly diverse assortment of products. Again, the imports from these countries reflect a high degree of concentration on producers' goods.

Trade Agreements

Mexico has been a party to relatively few bilateral or multilateral trade agreements: these agreements have had little overall effect on her trade patterns, except to indicate a desire on her part to diversify and expand the foreign markets. Mexico has general, most-favored-nation, bilateral agreements with Belgium, Luxembourg, Brazil, Canada, Chile, Costa Rica, Czechoslovakia, the Dominican Republic, El Salvador, France, Greece, Indonesia, Israel, Italy, the Netherlands, Poland, the Republic of China, Switzerland, the United Arab Republic, South Korea, and Yugoslavia. In fact, however, the same most-favored-nation treatment is given to all countries with whom Mexico trades with the exception of the LAFTA countries, who get preferential treatment. The latter multilaterial trade agreement is the only trade agreement that has shown clear signs of affecting Mexico's trade patterns. Mexico's trade with LAFTA countries has increased more than six-fold during the first 5 years of the effective existence of the agreement. Aside from these more common agreements Mexico has a so-called "payments agreement" with Spain whose overall effect seems little different from the preceding.

With a few exceptions, all of Mexico's bilateral trade agreements are very general in nature, providing neither for a channelling of trade nor for a reduction of tariffs. Those with Indonesia, Italy, Poland, and Yugoslavia, however, list specific products where exchange between the countries is to be promoted. None of the bilateral agreements attempt to promote trade through differential duties. This means that the imports from all but the LAFTA countries are charged identical specific and ad valorem tariffs and are subject in Mexico to the same import licensing requirements. The LAFTA agreement, on the other hand, is specifically intended to provide a tariff union; the parties to the agreement mutually provide agreed-upon tariff reductions to signatories to the LAFTA arrangement.

Ports of Entry and Exit

The changing pattern of Mexico's foreign trade has had a clearly discernible effect on the internal economic development of the country. This can be seen by viewing the change since 1910 in relative importance of the ports of entry and exit.

The most unambiguous trends in this regard are the rapid increase in trade carried on through points along the United States-Mexican border and the even more rapid decline in trade carried on through the Gulf Coast ports. Aside from the rapidly growing-air-transport trade from Mexico City and Guadalajara, the northwest region adjoining the states of California and Arizona have seen the greatest increase in trade. This is due to the westward expansion of U.S. population and wealth and to the growth in the agricultural, fishing, and trade industries of northwestern Mexico. There has been a corresponding population growth in such cities as Tijuana, Mexicali, Nogales, Ensenada, Guaymas, and Mazatlán during the mid-20th century. Yet, in spite of this, the states of Baja California del Norte and Sonora have the highest per capita income and third highest average family income in Mexico.

The very sharp increase in export trade carried on by Pacific Coast ports since 1910 resulted from the development of the fishing and agricultural industries on the west coast of Mexico, the increased trade with the west coast of the United States, and the very rapid expansion of trade with Japan, Australia, and the west coast members of LAFTA, Chile, Colombia, and Peru. This latter trend is most clearly evident in the export traffic carried through such Pacific Coast ports as Manzanillo and Salina Cruz.

Contrasting with the rapid rise in relative importance of the Pacific Coast is the decline of the Gulf Coast and, most notably, the ports of Veracruz and Tampico. While both ports are still among the most important in Mexico in terms of total foreign trade handled, their decline in overall importance has been sharp and steady. In 1878, Veracruz was handling over 62 percent of Mexican imports from abroad. By 1911, this proportion fell to little more than 37 percent and by 1967 it was 22 percent of Mexico's total imports.

Tampico was a somewhat different phenomenon, for the discovery of oil increased its importance abruptly—only to fall again when other important oil reserves were discovered and means of transport other than ships were expanded. Thus, in terms of total Mexican exports handled, Tampico jumped from 3.6 percent 1878 to 31.5 percent in 1911, only to fall back to 6.6 percent in 1967. In the same manner, the city's handling of imports grew from 1.3 percent in 1889 to 21.5 percent in 1911, only to decline to less than 6 percent by 1967. As a consequence, neither per capita income nor population growth has moved up along the Gulf Coast as it has in other areas, particularly in Mexico City and along the U.S.-Mexican border.

SERVICE TRANSACTIONS

Mexico, unlike most other developing nations, has been able to run a continuing surplus on its service account. While not completely offsetting the trade balance deficit, this service account surplus has helped finance the trade deficit and thus has meant the difference between stability or instability in the peso. The service account surplus, however, is rapidly becoming less able to provide a major share of the foreign exchange earnings required to cover the trade deficit; on average over the decade of the 1940's the surplus covered 88.5 percent of the trade deficit; during the decade of the 1950's it was 71.5 percent; by 1960, however, it covered only 30.5 percent and by 1966 only 18.8 percent. The burden of financing the trade deficit has thus shifted dramatically during the 1960's to the capital account.

By far the most important elements in sustaining the service account surplus have been tourism and border trade. As of 1967 Mexico stood second only to Spain in having the highest percentage of its foreign exchange earnings (38.4 percent as compared to 43.2 percent for Spain) received from tourism. Tourist trade increased from 100,000 per year just after World War II to some 1.5 million by 1967. Of these tourists, about 95 percent came from the United States, and of these more than 60 percent came from the neighboring states of Texas, California, Arizona, and New Mexico.

The Mexican share of the United States tourist dollar has risen greatly since just prior to World War II, now claiming some 21 to 22 percent of total United States travel expenditures. Large-scale public investment programs have contributed to this growth. For example, Mexico has developed the most extensive highway network to be found anywhere in Latin America. Much of this road development is laid to match the key north-south trunk lines to Mexico City, to take advantage of the fact that almost half of foreign travel in Mexico is by automobile. To this has been added the extensive National Border Program to develop the major cities lying along the U.S.-Mexican border. It has been estimated that every dollar spent by a tourist in Mexico creates 3.7 dollars in additional national income.

The government has long maintained special customs arrangements along its borders, having so-called "free zones" or "free perimeters" in Baja California, Sonora, and the Territory of Quintana Roo where the distance from domestic suppliers makes strict customs controls infeasible. These zones where goods can enter duty free if consumed within the zone have resulted in rapid development of unrecorded border imports, not only of producers' goods for nascent local industry but also of consumer goods for border-domiciled Mexicans. (It was estimated that in 1962 in the cities of Tijuana and Mexicali some 55 percent of the goods consumed monthly were imports.) Well aware of the potential balance of payments problem represented by this border trade and the import savings its curtailment could represent, the government has gradually removed products from the free list as domestic transportation and supply have improved.

Of the other items in the service account, gold and silver sales and personal remittances constitute the other major sources of foreign exchange earnings. Gold and silver, formerly the dominant exports of Mexico, now account for less than 4 percent of foreign exchange earnings. World market conditions have long been unfavorable, generally stemming from artificial price barriers imposed by international monetary practices. Silver, the more important Mexican export, suffers from the fact that most minable reserves make it a joint product with copper and lead or zinc. Because of this, silver production tends to suffer when the market conditions for the latter commodities are unfavorable, as they have been since the early 1950's. Moreover, both commodities (gold and silver) are faced with the same export restrictions as other Mexican mining products, so that it is not surprising to see the decline in importance of these commodities as foreign exchange earning sources.

Personal remittances were sharply curtailed as a source of foreign exchange when the bracero program was discontinued in 1964 (see ch. 4, Population; ch. 21, Labor). On the other hand, interest payments on public debt have grown tremendously during the 1960's doubling

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from 1960 to 1965 and preliminary figures would appear to indicate a tripling by 1967. This could pose a very serious balance of payments problem in the future, unless of course, the rate of growth in merchandise exports and other foreign exchange earning categories keeps pace with the rate of growth of interest payments on external public debt. The payments on direct foreign investment have exceeded the receipts since 1958. This would usually indicate a net loss of foreign exchange, except that in net income terms, where profits reinvested in the country are subtracted out of the outflow, Mexico has frequently shown a small net increase in foreign exchange from direct foreign investment during the 1960's (see table 40).

INTERNATIONAL LOANS AND INVESTMENTS

The capital account has been an increasingly important source of foreign exchange in financing the ever-present postwar deficit in the current account of the balance of payments. To date, the growth in the capital account surplus has been sufficient to maintain Mexico's official reserves. This has been due in large part to the very rapid rate of increase in the inflow of long-term capital from abroad. On the whole, short-term capital movements and net security operations have been relatively small, tending until recently to reduce slightly the capital account surplus.

Table 40. Direct Foreign Investment in Mexico in Selected Years, 1955–66
(In millions of U.S. dollars)

	1955	1960	1962	1964	1966 [1]
INCOME	105. 4	78. 4	126. 5	161. 9	186. 1
New investment	84. 9	[2] 62. 4	74. 9	95. 1	97. 4
Reinvestment	12. 5	10. 6	36. 2	50. 2	69. 5
Intercompany accounts	8. 0	5. 4	15. 4	16. 6	19. 2
OUTFLOW	79. 6	141. 6	159. 3	236. 1	250. 0
Net profits	61. 1	82. 8	92. 6	140. 2	155. 5
Remittances	48. 6	72. 2	56. 4	90. 0	86. 0
Reinvestment	12. 5	10. 6	36. 2	50. 2	69. 5
Interest, royalty, and other payments	18. 5	58. 8	66. 7	95. 9	94. 5
Net Income [3]	+38. 3	−42. 6	+3. 4	−24. 0	+5. 6

[1] Preliminary.

[2] Omits $116.5 thousand of disinvestment through the purchase of the electric power companies.

[3] Net income = income−(outflow−reinvested profits).

Source: Adapted from 1955–1962: Nacional Financiera, *Statistics on the Mexican Economy*, pp. 217–218; 1964, 1966: Banco de México, *Informe Anual.*

Private direct foreign investment (i.e., where the investor becomes the owner or joint owner of an investment) has been one of the most rapidly expanding elements of the long-term capital account, in spite of the fact that the country's foreign investment policy places primary emphasis on loans from foreign governments or international lending institutions to the Mexican government or its public agencies. Mexico, however, does not go out of its way to discourage direct private investment. Rather, it broadly defines the purview of foreign investment activity. Investments by foreigners and the earnings from them may be freely remitted, but foreign investors do not receive any special benefits beyond those available to domestic investors, and there are certain constitutional, statutory, and regulatory limitations on their actions.

This attitude toward foreign investment developed from an historical context of what Mexicans term "foreign exploitation" and "economic colonialism." In 1911, for example, U.S. investment in Mexico represented almost half the wealth of the country. By 1939, however, foreign capital financed only 15 percent of the total fixed investment in Mexico.

Once foreign investors got over the fear of expropriation created by the nationalization of the railroads in 1937 and the petroleum industry in 1938, foreign capital began to return in large quantities. Today there are nearly US$2 billion of direct foreign investment. In 1965, some 75 percent of this capital came from the United States. Whereas formerly the Mexican government considered private foreign investment exploitative, particularly in the sense of an overly rapid exhaustion of non-renewable natural resources, it now considers that investment to be complementing the pattern the state feels is necessary to insure rapid and balanced growth. In 1938 private foreign investment was reduced to zero in petroleum because of nationalization. At that time 25 percent of the foreign funds were still in mining, 32 percent in electric energy production, and 31 percent in transport and communications; only 6 percent was invested in manufacturing. By 1965, more than 60 percent of direct foreign investment was in maufacturing; the mining total fell to 10 percent and commercial activities about 12 percent. Moreover, foreign investment has contributed significantly to the process of import substitution which has helped maintain a favorable balance of payments during the postwar period. This beneficial aspect of direct foreign investment has not shown any consistent pattern of being outweighed through the reparation of profits to the investing countries.

The statistics on capital movements since World War II indicate a growing importance in the use of foreign development loans relative to new direct private investment. Since 1956 medium and long-term credits have exceeded by a considerable margin new direct investment, year by year. During the period 1942–1965, new direct investment from private foreign sources financed 5.7 percent of gross private fixed investment. Net credits from foreign development loans financed 11.4 percent of the gross fixed capital formation by the public sector during the same period. The total contribution of foreign capital was 10.7 percent of gross internal investment.

Mexico receives no foreign aid in fostering its economic development. Alliance for Progress funds were discontinued soon after their inception due to the already high performance of the Mexican economy. Rather, the Mexican government, generally through Nacional Financiera, a national industrial development bank, has negotiated for loans from international lending institutions or foreign governments. The direct, external debt of the federal government nearly tripled from $149.6 million in 1961 to $438.4 million in 1966. Some 91 percent of the external debt corresponds to international credits.

Since 1950, the total debt increased over four-fold and international credits rose fifteen-fold. The percentage of the external public debt with respect to gross national product has not exceeded 10 percent since 1950, although by 1964 it had risen to 9.6 percent from a low of 5.6 percent in 1956–1957. The proportion of external debt with respect to merchandise exports has never been less than 100 percent since 1960, rising to 168.5 percent in 1964. Fearing the potentially adverse affect the growing debt servicing payments could have on the balance of payments, the government has attempted to slow the growth of the external public debt and has also tried to lengthen the amortization periods of newly acquired credits. A critical problem in the rapid growth of this foreign debt is clear from the fact that, as of June 30, 1966, over 30 percent of the external debt was due to be amortized within a year and a half and 70 percent would fall due in little over 5 years. While a growing economy may well handle the servicing of the debt, unless the growth in the capital inflow or in export earnings should maintain pace with debt servicing requirements, a balance of payments problem could ensue. In anticipation of this potentiality the government slowed the rate of increase in external public debt after 1964, so that by 1966 as a proportion of Gross National Product it had fallen to 8.3 percent and as a proportion of merchandise exports it had declined to 158.6 percent.

Most of the public debt is handled by Nacional Financiera, either directly or as guarantor. Typically, it has come from international lending agencies (that is, the World Bank, the Export-Import Bank, the Inter-American Development Bank, or the Agency for International Development) or other large private banking or lending institutions. Mexico of late, however, has been able to float very large bond blocks on U.S. and European securities markets and have them purchased entirely within very short periods of time. Between 1942 and 1964, some 43 percent of the financing obtained abroad through the intervention of Nacional Financiera was through international lending agencies; nearly 33 percent in the form of guarantees, endorsements, and acceptances; and, about 17 percent through other banking institutions. Of these credits, nearly 30 percent went to electric power production, 22 percent to manufacturing industries (mainly, petroleum transportation equipment, metals, and chemicals), and some 17 percent each to the transport industry and the construction industry. This capital inflow, thus, not only contributed to the surplus on capital account and the maintenance of a favorable balance of payments, but also it has been an important element in preventing bottlenecks in critical sectors of the economy where less pronounced development would have seriously reduced Mexico's rate of growth.

THE ROLE OF GOVERNMENT

The Mexican government's policies toward foreign trade reflect much the same general attitudes as govern her policies in international politics, namely, trade with any country regardless of the political or socio-economic attitudes of that country. As long as trade would be mutually advantageous, Mexico will willingly enter international trade with any nation.

Complementing this, the main objective of the Mexican government's policy is import substitution by domestic products. That is, in order to reduce the trade balance deficit to a minimum consistent with the demands of growth, the Mexican government has attempted not so much to restrict imports *per se* as to attempt to expand exports while using imported capital and parts to establish industries which will provide goods in areas where imports were formerly necessary. The objective is to obtain maximum self-sufficiency, but the easiest areas of import substitution are now generally gone, as the government admits, and the more difficult terrain of providing relative expansion in intermediate—and capital—goods production must now be faced.

The basic instrument the Mexican government has used to regulate international trade is the manipulation of tariffs, particularly import duties. The rate structure of the import tariff system is composed of a specific duty, based on weight or quantity, plus an ad valorem duty which is assessed either on invoice value or on officially determined value (to prevent under-invoicing), whichever is higher. Some duty rates are relatively high, particularly on what the government determines to be "luxury goods" and on products which compete with domestic industries. The importation of some items, including arms, munitions, narcotics, some drugs, and chocolate confections, are prohibited. Other items, on the other hand, are allowed in duty free—including certain raw materials, certain drugs and insecticides, pedigreed animals, free catalogs with technical instructions, various ores and minerals, propane and butane gas, natural gypsum and numerous chemicals, linotypes, and certain machinery and equipment when determined to be needed for Mexico's economic development. The median import duty in Mexico is estimated to be little more than 60 percent, rising to its highest levels of protection with consumer durables (147 percent), processed consumer nondurables (117 percent), and processed foods (110 percent)—that is, in areas where attempts to spur import substitution have been greatest. On the other hand, tariffs are lowest on importants of capital goods (14 percent) and intermediate products (23 percent).

Although the Mexican tariff structure on average may seem high, it is low in comparison with other large Latin American countries. Moreover, total receipts of the federal government would seem to indicate the effectiveness of the import substitution program. For, whereas as recently as 1960 tariff revenues accounted for some 25 percent of the government's total revenues, by 1967 they accounted for little more than 14 percent.

Mexico uses other selective control mechanisms to affect the pattern of its foreign trade. The most important is a quota structure regulated by licensing arrangements. Goods representing about two-thirds of the total value of Mexico's merchandise imports are subject to import licenses. The licenses are not granted for the importation of products which are now or potentially in the near future produced in Mexico, or for which domestically produced goods can be substituted. The policy objective is to direct investment to those sectors of the Mexican economy which are deemed to require increased production and to ensure that foreign exchange is utilized primarily on those purchases the government has determined to be essential. This import licensing system is generally applied in a nondiscriminatory fashion, treating imports from all countries equally, except for LAFTA countries where preferential treatment is accorded. Export quotas, on the other hand, are few, used mainly to ensure supplies for what the government has determined to be domestic needs. The controls are most strongly applied to raw materials to prevent excessive export of irreplaceable natural resources and are frequently used to ensure domestic processing and manufacturing, for both internal consumption and export purposes. Unlike many other Latin American countries, Mexico has not resorted to exchange controls and differential exchange rates to affect its trade patterns.

As in other policy matters, the President of Mexico has effective power and authority over foreign trade arrangements (see ch. 13, The Governmental System). Within the executive branch, the president has delegated the responsibility for administering tariff policy to the Secretaría de Hacienda (Finance Ministry) and quantitative controls to the Secretaría de Industria y Comercio (Industry and Commerce Minister). In theory, tariff policy is to be formulated jointly by government and private interests through a mixed Comisión General de Aranceles (the general tariff commission). The commission as such, however, has generally not functioned effectively, in part due to the government's own desire to maintain maximum policy flexibility, in part because of the private sector's own conflicting interests making a single sectoral voice impossible, and in part because of the private sectors' general satisfaction with the governments' willingness to approve petitions of individual businessmen. Discord between the Finance Ministry and private business groups has typically been less over specific tariff rates than over red tape and time-consuming bureaucratic procedures.

The generally routine nature of tariff policy determination is in sharp contrast to the complicated factors involved in quantitative controls determination. Whereas a tariff is a matter of public record and a general instrument applied equally to all importers, quantitative controls, administered through import licenses, are poorly publicized and determined on a case-by-case basis and therefore stimulate deep and continuous involvement by private business interests. The list itself is determined by the interaction of two forces; balance of payment crises and industries whose production is to be protected from outside competition. Once a product reaches the quota list it seldom is removed, thus providing a process of continuous expansion in the government's potential authority to affect trade patterns.

While the quota list changes relatively slowly, the policies for granting licenses change fairly rapidly. Decisions approving or rejecting an application are not a matter of public record, and the license once granted is non-transferrable. Therefore, there is every incentive for private interests to participate actively in the licensing procedures. More than two dozen committees exist to plead the case of various industries, each committee consisting of an official of the Secretaría de Industria y Comercio (the acting chairman), and representatives of the organizations of private industrial or commercial enterprises.

These committees, at the request of the Secretaría de Industria y Comercio, recommend, by majority vote, that the government either grant or deny a license. Regulations issued in 1956 state the licenses are to be granted when the national product is obtainable only under conditions which compare unfavorably with the foreign product, as far as quality and time of delivery are concerned. A license may also be granted when no domestic substitutes are available, when a temporary shortage exists, when national production seems inadequate to meet national demand, or when a build-up of a reserve of a commodity or product is deemed necessary. Notable in its absence from the list is the price element. Frequently, however, the government has used the threat of allowing import of competitive finished products if domestic producers did not reduce their "excessively" high prices. In general, however, the role of private enterprise in license and quota determination is purely advisory, and the government gives more or less consideration to a committee's recommendation according to shifts in Mexico's over-all trade policies. In fact, the government now tends to use the committee discussions as a means of obtaining information on the state of domestic manufacturing and on the possibilities for broadening the scope of import substitution in various areas of the economy.

At the institutional level, not only are the committees described above important but likewise, if not more so, are two pressure groups created by the government, the Confederación de Cámaras Industriales—CONCAMIN (Confederation of Chambers of Industry) and the Cámara Nacional de la Industria de Transformación—CNIT (National Chamber of Manufacturing). While legally CNIT is a part of CONCAMIN, in practice the two represent opposing viewpoints on the central issues of the pattern of industrialization. The spokesmen in CNIT represent small- and medium-sized enterprises, whose position is such that they must rely on domestically produced intermediate products. Therefore, they support the greatest possible import restrictions in order to curb the competitive advantage of larger firms which can buy internationally. The CONCAMIN, on the other hand, is the spokesmen for large-scale industry, including foreign-owned subsidiaries, and has generally opposed the government's program of domestic industrial integration and has sought to maintain some degree of access to imported materials and components.

It is this inability to present a unified front (even within an organization) to the agencies charged with the administration of the foreign trade policy that has weakened private enterprise's bargaining position at the institutional level. And this situation is further exaccerbated by the lack of centralization in a single authority of the power to create and administer protectionist policies. This makes group decisions of policy direction relatively inconsequential in Mexico, even though superficially this would not seem to be the case. It also makes direct contact between individual entrepreneurs and government officials of utmost importance in the final decisions. It is these contacts which determine the relative bargaining strength of a firm's position vis-à-vis the government and other firms in the industry. And it is these contacts which, while not necessarily determining the overall direction of foreign trade policy, influence how the stated policy will affect individual firms and entrepreneurs.

Aside from the policy elements controlling the direction and flow of foreign trade through tariff and quantitative controls, the Mexican government also attempts to assist in the growth and development of exports through the provision of credit (see ch. 25, Banking and Currency). The Banco Nacional de Comercio Exterior (Foreign Commerce Bank) basically provides three types of credit: for the financing, particularly by public sector entities, of import-export operations; for the exportation of agricultural, livestock, and industrial items; and for local commerce. By 1965, the Foreign Commerce Bank had arranged for some $320 million in credits. The Fondo para el Fomento de las Exportaciones de Productos Manufacturados (Fund for the Development of the Export of Manufactured Products), a a trust fund controlled by the Banco de México, extends credit if the payment for the product being exported is in Mexican pesos or U.S. dollars. It funds its operations through a 10 percent ad valorem tax on certain imports. The Fondo para la Promoción de las Exportaciones Mexicanas (Fund for the Promotion of Mexican Exports), controlled by the Foreign Commerce Bank, was created in August 1966 to help finance various promotional activities and to provide direct help to exporters. Finally, the Foreign Commerce Bank, through the Centro Nacional de Información sobre Comercio Exterior (CENICE, the National Center for Information about Foreign Commerce) provides information about the conditions and capacity of various foreign markets, transport problems, packing and shipping problems, and the organization of commercial missions, and makes special studies on products and markets.

CHAPTER 24

PUBLIC FINANCE

Fiscally, Mexico is highly centralized. The federal government takes in approximately four-fifths of the nation's tax revenues and does virtually all public borrowing. Of equal importance, however, are the revenues of its autonomous agencies, which are mainly engaged in the provision of social security, power, and transportation. Together, the direct and indirect activities of the central government represent somewhat over one-fourth of the gross national product (GNP).

In spite of the important role of government in the national economy, the tax burden is comparatively light; total tax receipts at all levels of government represent between 11 and 12 percent of GNP, inclusive of social security contributions. What is more, compared with most Latin American countries, the incidence of taxation on lower income groups is light. Almost half of the federal tax receipts are provided by a moderately progressive system of personal and corporate net income taxation.

Because of the large role of autonomous public enterprises (the most important of which are included in the federal budget), comparisons based on the budgetary share of various types of expenditure tend to be somewhat misleading; a clearer picture is obtained by presenting them as a percentage of the GNP. Actual federal outlays in 1966, based on the consolidated budget, represented the following proportions of GNP for that year: economic infrastructure and basic industry, 15.0 percent; debt service, 4.5 percent; social security and welfare, 2.5 percent; public education 1.7 percent; general administration, 1.0 percent; public health, 0.9 percent; irrigation, conservation, and resource development, 0.8 percent; and the armed services, 0.7 percent. The preponderance of public outlays on such economic infrastructure as power, irrigation, transport, and communications is the outcome of a clearly recognized system of priorities in the allocation of scarce resources.

The more usual basis of comparison, applied to direct federal expenditures for the same year, presents a much more favorable picture in terms of outlays on social infrastructure: 14.3 percent of the budget for public education, 7.8 percent for social security, and 6.8 percent for public health, and 5.5 percent for defense.

There is always a wide discrepancy between Mexican budgetary estimates of direct federal expenditures and actual outlays. Thus, for 1966 the budgetary estimate approved by congress showed 25.7 percent going to education, whereas only 14.3 percent was spent for this purpose, although the sum estimated and that spent were nearly the same. These budgetary forecasts characteristically underestimate both revenues and expenditures by 30 or 40 percent, and are subsequently revised upward at the discretion of the executive.

In spite of the wide deviation between budgetary estimates and actual expenditures, and extensive use of the federal borrowing power, the fiscal policy of the government in recent years has been conservative. Although the manner in which published figures on the national accounts are presented prevents their precise interpretation, they leave no doubt that a considerable proportion of long term capital outlays are financed out of current revenues—a practice that has come under some criticism from those who wish to see an increase in current outlays in the social sector. Capital outlays are preponderantly on self-liquidating projects and economic infrastructure (such as power and irrigation); there is no deadweight debt incurred for purposes which make not corresponding contribution, direct or indirect, to the fiscal resources of the government.

In recent years, the country's international credit has been firmly established. On December 31, 1967, outstanding obligations of the federal government, including contingent liabilities arising from guaranties, amounted to approximately 18.3 percent of the GNP, while external obligations came to only 5.3 percent.

SOURCES OF REVENUE

In any consideration of the revenue sources of the Mexican federal government, it is necessary to distinguish at the outset between those of the direct federal budget and those of the autonomous government organizations and state enterprises which have been brought within the purview of the federal budgetary process. In 1967, the total revenues of both amounted to 79.5 billion pesos (12.5 pesos=US$1), of which 40.5 billion, or 51 percent, went to the federal government and 38.9 billion, or 49 percent, went to the autonomous organizations. The revenues of both amounted to approximately 26.4 percent of GNP.

Of the total direct revenues of the federal government, 24.4 billion were derived from taxes (see table 44). This represented 8.1 percent of GNP, a ratio which has shown a slight upward trend over the past decade. Total tax collections at all levels of government averaged 11.5 percent of GNP from 1960 to 1967—7.5 percent by the federal government, 0.9 percent by the Federal District, 1.6 percent by the states and municipalities, and 1.5 percent in social security contributions. Although the economic role of the government in Mexico is relatively

Table 41. Direct Revenues of the Mexican Federal Government, 1965–1968

[In millions of pesos [1]]

	1965		1966		1967		1968
	Estimated	Actual	Estimated	Actual	Estimated	Actual	Estimated
Tax Receipts:							
Income taxes	7, 558	8, 637	8, 779	8, 631	9, 528	n.a.	10, 465
Excise and production taxes	2, 631	4, 238	2, 827	4, 910	3, 258	n.a.	3, 583
Gross receipts tax	1, 785	2, 142	2, 030	2, 432	2, 538	n.a.	2, 781
Import duties	2, 361	3, 412	2, 736	3, 595	2, 567	n.a.	2, 829
Export duties	567	1, 215	503	1, 249	479	n.a.	519
Total Tax Receipts	*14, 902*	*19, 644*	*16, 875*	*20, 817*	*18, 370*	*24, 419*	*20, 177*
Other Current Income	2, 303	2, 130	2, 608	2, 754	3, 089	2, 392	3, 396
Total Current Receipts	*17, 205*	*21, 774*	*19, 483*	*23, 571*	*21, 459*	*26, 811*	*23, 573*
Capital Receipts:							
Loans	600	13, 758	600	8, 794	600	13, 069	600
Other	50	248	50	891	50	636	50
Total Capital Receipts	*650*	*14, 006*	*650*	*9, 685*	*650*	*13, 705*	*650*
Total Revenues	17, 855	35, 780	20, 133	33, 256	22, 109	40, 517	24, 223

[1] 12.5 pesos = US$1.

Source: Adapted from *Comercio Exterior; El Mercado De Valores.*

large, in terms of GNP, it is evident that the tax burden is small.

In moving toward the goals enunciated in the 1960's by the Alliance for Progress, Mexico has shifted, in the course of the last three decades, toward a less regressive tax system. In 1940, about one-fourth of federal tax revenues came from direct taxation, while about three-fourths came from indirect taxes. In 1967, more than half came from direct taxation—over 40 percent from income taxation alone, which had contributed less than 8 percent in 1939 and only 24 percent in 1950. Since the federal income tax is moderately progressive, and Mexican import duties, as a rule, do not bear heavily on lower income groups, the tax system as a whole is far more progressive than in most other Latin American countries.

During the 1960's, the income tax has been simplified and collection procedures have been improved. Before 1962, there was no personal net income tax; there was instead a system whereby taxes were charged to income on the basis of its source, under nine different schedules. In 1962, the first move was made toward a personal net income tax; the aggregate of personal income in excess of 180,000 pesos, derived from several scheduled sources, was made subject to a special surtax. Effective January 1, 1965, however, an entirely new income tax law was passed, doing away with the former system.

The new law establishes two classes of taxpayers: business enterprises, which are subject to a single schedule of new income taxation; and individuals, who are taxed, with certain exemptions and deductions, on income from capital or personal services. Where an individual's taxable income does not exceed 100,000 pesos, he may be taxed separately on the two types of personal income. If his taxable income is in excess of 100,000 pesos, the total of both forms of income is taxed under another schedule applicable to overall personal income from both sources. The rates on personal income rise progressively up to 300,000 pesos in taxable income, and income in excess of this amount is taxable at 35 percent. Dividend income from Mexican business enterprises other than sole proprietorships is specially treated and subject to withholding at the source, at a maximum rate of 20 percent.

Business enterprises of all types are subject to an overall tax on net income from all sources (with certain exceptions designed to avoid double taxation). The tax is steeply progressive up to 500,000 pesos in taxable net income; above that amount, it is taxed at 42 percent.

During the 1960's reforms have been made in the administration of the tax. In 1962, a Federal Registry of Taxpayers was established; its initial purpose was to list all taxpayers, assigning each a number to be used in identifying documents related to income and expenditures. The ultimate purpose is to bring income tax administration under data processing control. Partly as a result of tightened administrative procedures, the number of registered taxpayers rose from 2.5 million at the end of 1962 to 8.3 million in June 1968.

Under the tightened procedures, there has been a trend toward increased income tax collections from individuals, as compared with collections from business enterprises. In 1960, enterprises accounted for 74.6 percent of total income tax revenue; by 1965, this proportion had dropped to less than 58 percent. With improved administration, the relative increase in the contribution of income taxation to total federal tax revenues would probably have been even greater, but the government provides liberal fiscal incentives for corporate investment and reinvestment. Thus, under the Law for the Encouragement of Industry, "new and needed" industries may be granted tax concessions, including exemptions from up to 40 percent of their income tax liabilities, for a period of up to 10 years (see ch. 20, Industry). The income tax law also permits accelerated depreciation for firms that make new investments in machinery and equipment. Firms producing manufactured goods for export may also be eligible for benefits, including reductions in the income tax.

The gross receipts tax (*impuesto sobre ingresos mercantiles*) is important in the Mexican tax system, consistently producing around one-tenth of total federal tax revenues (11.7 percent in 1966). The tax applies to gross receipts derived from regular sales, transfers, or rentals of goods and property (exclusive of land and buildings), and to the rendering of commercial services. Taxable receipts are subject to a 1.8 percent rate, and to an additional rate of 1.2 percent in the Federal District and territories and in those states that have abolished their own taxes on commerce and industry in return for a share of the gross receipts tax revenues collected in their jurisdiction. The gross receipts tax, with a maximum combined rate of 3 percent, is collected repeatedly at the manufacturing, wholesale, and retail levels, falling on the same goods at various stages of processing; it has apparently provided considerable incentive for corporate management to integrate vertically as a means of avoiding of double taxation.

Duties on imports and exports continue to be important, though their role in the federal tax system is declining (see ch. 23, Foreign Economic Relations). In 1940, taxes on foreign trade represented 35.9 percent of the total fiscal revenues of the federal government; in 1966, their relative contribution had fallen to 23.3 percent. A basic change in the nation's economic policy underlies this trend. Up to World War II, customs duties were employed mainly as a revenue source; under a policy designed to promote Mexican industrialization, however, import duties on finished goods are often fixed at levels which exclude them. Producer goods, on the other hand, may be admitted duty free for the benefit of the Mexican manufacturers who use them. The government is also actively interested in promoting and diversifying exports and has shown increasing unwillingness to burden them with export duties, except in the case of the unprocessed products of extractive industries.

The other major source of tax revenues is the series of excise and similar taxes imposed on the production and consumption of goods and services, including alcohol, automobiles, sugar, tobacco, and electrical energy. The importance of these taxes fell considerably after World War II, but has again increased in recent years, accounting for over 20 percent of federal tax revenues in 1966.

FEDERAL EXPENDITURES

The federal estimate of budgetary expenditures is presented to congress with various analytical breakdowns. These include an administrative budget of direct federal expenditures by the ministries (see table 42) and a consolidated capital budget (see table 43). There is also a breakdown in terms of economic impact (see table 44).

All these budgets are affected by the marked discrepancy between budgetary estimates and actual outlays. Thus, although estimates of direct federal outlays for 1966 were projected at 20.1 billion pesos, a final accounting showed actual expenditures of 32.5 billion. While some of the difference arose from the practice of including both interest and debt retirement under a single heading for debt service, most was the outcome of actual increases in expenditures, as compared with the congressionally approved estimates. Relatively small differences between estimated and actual figures are shown for most categories. Outlays under the important heading of industrial development, however, showed an increase from 18.0 billion pesos to 29.5 billion, most of which represented increases in direct federal expenditures.

Greatly increased outlays on industrial development, as compared with the congressional estimates, also affect the capital budget. Thus, in 1967 the estimated capital budget showed a total of only 11.2 billion pesos, while actual outlays amounted to 21.0 billion.

The relative importance of capital outlays on industrial development may be seen in the actual figures for 1967, and in the amounts programmed for expenditure in 1968 by September 1 of that year. In 1967, out of a total of 21.0 billion pesos, 63.7 percent went to industry, transport, and communications, 22.7 percent for investment in social infrastructure, and 9.6 percent to irrigation. Programmed capital investments of 24.5 billion pesos for 1968 were 61.9 percent for industry, transport, and communications, 24.6 percent for social infrastructure, and 9.8 percent for irrigation. Thus, characteristically, around three-fourths of capital outlays by the federal government and its autonomous organizations is being channeled into economic infrastructure.

The consolidated budget shows a similar pattern, with around 60 percent of the total (current and capital) outlays generally being directed into economic and 20 percent into social activities, while around percent goes for general administration and less than 3 percent for defense.

The pattern of federal expenditures described is consistent with Mexico's recent history of industrialization and rapid economic growth. In terms of future development, however, the relatively low level of such expenditures as those on public education—which in 1966 represented 14.4 percent of the direct federal budget, 7.0 percent of the consolidated budget, and only 1.7 percent of GNP—may limit the potential for continuation of rapid growth.

INCOME AND EXPENDITURES OF DECENTRALIZED AGENCIES AND STATE CORPORATIONS

The economic activity of the Mexican federal government is far larger than that indicated by its direct revenues and expenditures. It includes a large number of decentralized agencies (*organismos descentralizados*) established by law or decree for the performance of specialized public or social services. Included also are a number of wholly nationalized corporations, which can be described as state corporations. Finally, there are numerous state participation enterprises (*empresas de participación estatal*) organized like private corporations but controlled by the state, either through majority stock ownership, by a charter establishing a series of stock to which only the government can subscribe, or by requiring government selection of a majority of the board of directors. The government has also on occasion stipulated representation on the boards of directors of private companies, in return for federal guaranties of credits. Although many decentralized and state participation enterprises remain outside the federal budget, beginning with the budget of 1965 the major decentralized agencies and state corporations were brought within its purview.

The autonomous organizations within the scope of the federal budget are of great importance to the economic and social development of Mexico. They include the key energy producers, major transportation agencies, and social welfare institutions. The energy sources under the budget include the national petroleum monopoly (Petroleós Mexicanos) and the organizations which supply all of the nation's public electric power. The transportation agencies covered are the four government railway companies which made up the country's rail system, the largest airline, the federal toll road agency, and the federal airport authority.

Table 42. Mexican Federal Budget of Direct Expenditures, by Administrative Categories, 1961, 1966, and 1968

	1961			1966				1968
	(a) Published budgetary estimate (in millions of pesos ¹)	(b) Actual expenditures (in millions of pesos ¹)	Difference between (a) & (b) (percent)	(c) Published budgetary estimate (in millions of pesos ¹)	Revised budgetary estimate (in millions of pesos ¹)	(d) Actual expenditures (in millions of pesos ¹)	Difference between (d) & (c) (percent)	Published budgetary estimate (in millions of pesos ¹)
Legislative	52	63	21	79	93	93	18	81
Presidency	19	83	337	67	172	167	149	72
Judiciary	48	48	0	72	69	65	−10	97
Interior	63	69	10	96	114	103	7	128
Foreign affairs	122	127	4	197	223	208	6	242
Finance	425	492	16	691	992	855	24	766
Defense	760	774	2	1, 333	1, 282	1, 181	−11	1, 497
Agriculture	252	234	−7	411	412	332	−19	450
Communications and transport	748	719	−4	1, 131	1, 268	967	−15	1, 330
Industry and commerce	102	102	0	140	162	141	1	153
Education	2, 112	2, 196	4	5, 183	5, 060	4, 697	−9	6, 482
Public health	541	780	44	1, 223	1, 293	1, 246	2	1, 389
Marine	353	296	−16	596	558	494	−17	635
Labor	39	39	0	58	56	56	−3	63
Agrarian affairs	82	78	−5	116	128	126	9	116
Hydraulic resources	829	812	−2	1, 631	2, 059	1, 453	−11	2, 133

Attorney general	22	23	5	41	40	37	−8	66
National patrimony	77	332	331	274	336	308	12	322
Military industry	61	62	2	82	78	65	−21	83
Public works	1, 047	1, 029	−2	1, 240	2, 506	1, 495	21	1, 777
Tourism	32	33	3	83	95	85	2	96
Financial investments	813	1, 340	65	890	4, 176	4, 007	350	1, 907
Additional expenditures	1, 384	3, 266	136	3, 409	8, 070	7, 338	115	2, 911
Public debt	1, 049	7, 365	602	1, 158	10, 016	6, 978	503	1, 424
Total direct expenditures	11, 042	20, 362	85	20, 132	39, 256	32, 496	61	24, 221

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[1] 12.5 pesos = US$1.

Source: Adapted from *Cuentas Públicas de la federación y Presupuestos de la federación, Comercio Exterior.*

Table 43. Mexican Federal Consolidated Capital Budget, 1967 and 1968

	1967 (Actual)		1968 (Programmed)	
	(in millions of pesos [1])	Percent	(in millions of pesos [1])	Percent
Total	21, 057. 4	100. 0	24, 500. 0	100. 0
Agriculture and Fisheries	2, 405. 0	11. 4	2, 940. 0	12. 0
Irrigation	2, 024. 2	9. 6	2, 400. 0	9. 8
Other	380. 8	1. 8	540. 0	2. 2
Industrial	8, 520. 0	40. 5	9, 400. 0	38. 4
Petroleum and gas	4, 131. 5	19. 5	5, 200. 0	21. 2
Electricity	2, 498. 6	11. 9	2, 950. 0	12. 1
Other	1, 889. 9	9. 0	1, 250. 0	5. 1
Transportation and Communications	4, 902. 5	23. 2	5, 757. 0	23. 5
Highways	2, 170. 3	10. 3	2, 255. 0	9. 2
Railways	1, 352. 8	6. 4	1, 615. 0	6. 6
Air transport	655. 1	3. 1	870. 0	3. 6
Other	724. 3	3. 4	1, 017. 0	4. 1
Social Welfare	4, 769. 0	22. 7	6, 035. 0	24. 6
Miscellaneous urban works	1, 064. 6	5. 1	1, 510. 0	6. 2
Water and sewage	1, 215. 1	5. 8	2, 020. 0	8. 2
Education and research	1, 020. 8	4. 8	1, 030. 0	4. 2
Hospitals and medical centers	606. 3	2. 9	1, 025. 0	4. 2
Other	862. 2	4. 1	450. 0	1. 8
Defense Installations	460. 9	2. 2	368. 0	1. 5

[1] 12.5 pesos = US$1.

Source: Adapted from *El Mercado de Valores.*

Five major social welfare agencies come under budgetary laws. The social security system at large (see ch. 21, Labor) is administered by the Mexican Institute of Social Insurance (Instituto Mexicano del Seguro Social—IMSS). Government employees are covered by a similar program administered by the Social Services and Security Institute for Public Employees (Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado—ISSSTE). The National Housing Institute (Instituto Nacional de la Vivienda—INV) coordinates public housing programs (see ch. 8, Living Conditions). The National Lottery (Lotería Nacional para la Asistencia Pública) is an agency providing various programs of public assistance using the proceds from a government-sponsored lottery. Finally, the National Staple Supply Agency (Compañía Nacional de Subsistencias Populares—CONASUPO) controls the prices of basic commodities and supplies them if necessary (see ch. 19, Agriculture).

Table 44. Summary of Federal Consolidated Impact Budget (Including Autonomous Organizations) of Mexico, 1955–1968

[In millions of pesos [1]]

Budget areas	1965		1966		1967	1968
	Estimated	Actual	Estimated	Actual	Estimated	Estimated
Economic development	21,047	33,991	--------	40,347	31,469	34,345
Communications and transport	6,056	7,301	7,425	8,609	9,144	9,552
Irrigation, conservation, and resource development	1,995	1,865	2,144	2,200	2,640	2,685
Industrial development	12,996	24,825	17,977	29,538	19,685	22,108
Social expenditures	9,805	13,412	--------	12,080	16,764	18,626
Education	4,182	4,028	4,750	4,659	5,294	5,950
Public health	995	1,815	3,216	2,495	3,445	3,771
Social security and welfare	4,628	7,569	7,512	6,926	8,025	8,905
Armed services	1,910	1,651	2,073	1,789	2,148	2,285
General administration	1,236	5,094	1,339	2,857	1,422	1,552
Public debt [2]	3,010	9,871	5,947	6,978	3,725	4,605
Unallocated	0	1	0	4	0	0
Total	37,008	64,020	52,383	66,054	55,527	61,414

[1] 12.5 pesos = US$1.

[2] Does not include debt service by autonomous organizations.

Source: Adapted from *Comercio Exterior.*

Among the autonomous organizations covered by the federal budget, a number receive substantial subsidies. These made up 4.8 billion pesos of the total estimated budget of 42.0 billion pesos for 1968. Of these subsidies, 1.3 billion was allocated to the two social security institutions in accordance with an established formula, 500 million to CONASUPO, and 73 million to the National Housing Institute—justified in each case by the public service functions of these organizations. The electric power enterprises were to receive 1.2 billion, essentially in support of public welfare programs such as rural electrification. The national railways have been heavily subsidized for many years, partly to underwrite persisting operating deficits and partly in support of a long range program for the rehabilitation of their facilities, which were dilapidated and obsolete at the end of World War II. The railway subsidy, budgeted at 1.7 billion pesos for 1968, has been reduced from year to year. Except for these subsidies, the autonomous organizations were all financed through their own resources (see table 45).

Partly because of the nature of their operations and the relative predictability of their revenues and outlays, the actual budgets of

Table 45. Summary of Budgetary Estimates for Autonomous Public Agencies of the Mexican Federal Government, 1968

[In millions of pesos [1]]

	Own resources	Subsidies	Total
Total revenues	37,193	4,811	42,004
Expenditures:			
Petróleos Mexicanos	11,885	--------	11,885
Electric Power Enterprises	6,913	1,198	8,111
National Railways	3,947	1,692	5,639
Social Security Institutions	7,617	1,348	8,965
National Lottery for Public Assistance	2,328	--------	2,328
Agricultural Marketing Company	3,230	500	3,730
Federal Toll Roads	344	--------	344
Aeronaves de Mexico	784	--------	784
Airport Authority	102	--------	102
National Housing Institute	43	73	116
			42,004

[1] 12.5 pesos = US$1.

Source: Adapted from *El Mercado de Valores*, Dec. 2, 1968.

the autonomous organizations tend to be closer to the budgetary estimates than the direct federal budget is. An exception to this is the agricultural marketing organization. Since its major functions are to assure producers a fair price for their products and at the same time provide consumers with an ample supply of basic foodstuffs at a reasonable cost, its activities depend on the weather. Thus, the need to purchase from domestic producers, import, store, and market foodgrains is subject from time to time to wide and unpredictable variations.

STATE AND LOCAL FINANCES

In Mexico, long-active centrifugal forces have motivated the high degree of fiscal centralization that now prevails. An early history of regional unrest and the perennial emergence of regional "strongmen" (*caciques*) often capable of contesting the central authority has led successive regimes to place most of the nation's public revenues at the disposal of the federal government. Although the Revolution of 1910 finally brought an end to *continuismo* (perpetuation by extra-legal means of a president's power beyond the elected term of office) a high proportion of Mexican ex-presidents emerge as regional leaders.

The end result of this process is that the tax resources of the federal government (including social security contributions) make up approximately 80 percent of all tax revenues. Of the remaining 20 percent, almost two-fifths (those of the Federal District) are also immediately subject to the central authority. The degree of centralization is accentuated by all the revenues of the autonomous organizations of the federal government. Including these three sources, over 25 percent of the GNP is at the disposal of the federal government, while only about 1.6 percent is in the hands of the states and municipalities. The financial capacity of state and local government is further impaired by a constitutional limitation on borrowing power, including a prohibition against their incurring debt for any project that is not self-liquidating.

The Constitution also prohibits states or municipalities from imposing taxes or other restrictions on the freedom of interstate or international trade. The federal government has further pursed, for many years, a policy of tax coordination designed to limit the states and municipalities to inherently local fiscal devices such as the property tax and some types of taxes on retail trade. Incentives to local cooperation are provided by a tax-sharing arrangement by which states that abolish their taxes on commerce and industry are entitled to receive the proceeds of an additional levy of 1.2 percent on gross receipts (the basic federal rate is 1.8 percent) collected in their jurisdictions. Where the states accept this and other tax sharing privileges in lieu of their own taxes, the tendency is toward even greater fiscal centralization.

A further limitation on state and local fiscal capability is implicit in the country's tradition of low property taxation. Increases in the property tax rates or in the efficiency of their collection are usually opposed effectively at the local level. Assessments are seldom current, and effective rates probably seldom exceed 1 percent of fair market value and are often much lower. Although state governments have sought from time to time to escape the limitations imposed upon their taxing power, the general share of the states and municipalities in national tax revenues has not gone up in recent years.

While the Constitution provides that the municipalities may freely administer their own public finances, it also states that these finances shall be composed of the taxes imposed by the state legislature—a provision that deprives the municipalities of their fiscal autonomy and makes them subordinate territorial divisions of the states.

In recent years, the states and territories and their component municipalities have aggregated revenues amounting to around 1.6 percent of GNP. Three-fourths of these have been received by the states and territories and one-fourth by the municipalities. Thus, in 1966, revenues of the states and territories totalled approximately 3.2 billion pesos and those of the municipalities about 1.1 billion. Taken together, this averaged not much over 100 pesos per capita. Although the per capita figure varies from less than half of the average amount in impoverished areas like the state of Tlaxcala to more than twice the average in such prosperous regions as Sonora, even in the latter their inadequacy to local requirements has been the subject of bitter complaint.

In the Federal District itself, where per capita local revenues are around four times the national average, a high proportion of the budget is absorbed by the routine expenses of justice and administration, and the approximately one-fourth of the local budget expended upon public works has proved insufficient to keep abreast of growing needs for water supply, sewage facilities, and other services which are the prime responsibility of local government. Although this problem has been recognized by the federal authorities, such moves as have been made toward its solution (by providing such needs as farm-to-market roads and rural electrification) imply the growth of federal responsibilities rather than any reversal of the present fiscal centralization.

THE PUBLIC DEBT

When Mexico gained its independence from Spain, the national treasury was empty, and the republican government had to borrow from foreign private sources. In 1833, outstanding loans—including those granted to the Spanish colonial government, to the later insurgent leaders, and to the republican government—were consolidated. Up to 1876, however, these loans had still not been repaid, because of half a century of war and political unrest. Not until the late 1890's was Mexico's international credit standing sound enough for the country to obtain loans once more.

By the outbreak of the Revolution of 1910, the then-equivalent of US$1,500 million had been lent to Mexico from abroad, of which the public debt represented the equivalent of only US$200 million. Much of the foreign debt of private enterprise, however, was subsequently assumed by the Mexican government, particularly after the expropriation of the railways and the foreign oil companies in the 1930's. During the early 1940's the Mexican debt was consolidated to include all foreign claims arising from the revolutionary struggle (except those contracted by Victoriano Huerta), and the government formally assumed the railway loans and recognized its obligation to repay the foreign oil companies. Payment of principal and interest was begun in 1941, and by 1960 these old debts were almost entirely paid. By the early 1960's the country had established a strong position in the international capital market.

As of December 31, 1967, the total direct debt of the Mexican federal government represented approximately 14.1 percent of GNP (see table 46). Of a total of 42.4 billion pesos outstanding, some 84.6 percent was internal and 15.4 percent external debt, bringing total foreign direct obligations to little more than 2 percent of GNP.

Table 46. Direct Debt of the Mexican Federal Government, 1962–1967
[In millions of pesos [1]]

Year (as of Dec. 31)	Funded debt			Unfunded debt			Total direct debt [2]		
	Internal	External	Total	Internal	External	Total	Internal	External	Total
1962	7, 729	1, 525	9, 254	2, 251	88	2, 339	9, 980	1, 613	11, 593
1963	14, 205	2, 563	16, 768	352	88	440	14, 557	2, 651	17, 208
1964	18, 493	4, 132	22, 625	143	38	181	18, 636	4, 170	22, 806
1965	27, 407	4, 795	32, 202	8	----------	8	27, 415	4, 795	32, 210
1966	31, 559	5, 464	37, 023	4	----------	4	31, 563	5, 464	37, 027
1967	35, 870	6, 513	42, 383	10	----------	10	35, 880	6, 513	42, 393

[1] 12.5 pesos = US$1.
[2] Excluding contingent liabilities.

Source: Adapted from *El Mercado de Valores*, Dec. 2, 1968, p. 785.

In addition to its direct obligations, the federal government has guaranteed principal and interest on certain loans granted to public institutions, principally to the government development bank, the national bank of public works, the national petroleum monopoly, the federal electric commission, and the national railways. On December 31, 1967, such contingent liabilities amounted to 12.7 billion pesos, of which 9.3 billion covered external debt payable mainly in United States dollars and 3.4 billion covered internal debt payable in pesos. Including both direct obligations and contingent liabilities, the total federal commitment amounted to approximately 18.3 percent of GNP, of which the external share came to 5.3 percent of GNP.

Credits solicited by public enterprises, particularly where these involve transactions in foreign currencies, are subject to the scrutiny and approval of the responsible fiscal agencies of the federal government, particularly the Nacional Financiera and the Banco de México. Faced with the continuing need to finance public deficits, the intent of policy is to manage finances in such a way as to avoid both inflation and adverse effects on the balance of payments.

Central bank policy is effected by selective credit controls, making it possible to influence not only the amount but also the direction of credit extended by the banking system (see ch. 25, Banking and Currency). These controls have been used to divert from the private sector the financing, through private credit institutions, of the public debt; in this way, it has been possible to finance public debt without excessive expansion of the money supply. In consequence, although the growth rate of the public debt has been somewhat higher than that of the gross national product, the annual increase in the price level over the last decade has been typically less than 3 percent.

Because of omissions in published statistics, there is some confusion about sources of financing for long-term capital outlays. Doubtless a high proportion of these funds come out of current revenues—a practice under considerable criticism from those who want an increase in current expenditures on social services. Although the capital outlays of the federal government and the autonomous organizations are not all, strictly speaking, self-liquidating, the overwhelming majority are either self-liquidating or involve the creation of economic infrastructure tending to support economic development and broaden the tax base. There has been no creation of deadweight debt—as by heavy debt-financed outlays on defense, internal security, or ill-considered welfare programs—of the sort that would make no contribution, direct or indirect, to the fiscal capacity of the government.

THE BUDGETARY PROCESS

In the early years of the revolutionary government, budgetary processes were haphazard, frequently initiated by presidential decree and typified by appropriation and expenditure of large sums of money outside of the budget. Seeking to regularize and formalize the broad budgetary provisions of the Constitution of 1917, President Lázaro Cárdenas in 1935 promulgated the Ley Orgánica del Presupuesto de Egresos de la Federación (Organic Law of the Federal Expenditures Budget). Although executive discretion in the budgetary process is still wide, its administration has been steadily improved.

According to the Constitution, the budgetary laws, and administrative regulations, final policy decisions rest with the legislature, while responsibility for the preparation and execution of the budget lies with the executive. The budget law provides for a unified projection of incomes and outflows for every fiscal (calendar) year, requiring for each year the enactment of a single law detailing expected revenues (Ley de Ingresos—Law of Revenues) and a single budget of anticipated expenditures (Ley de Egresos—Law of Expenditures) before money can be collected or spent. Control of the Law of Expenditures is constitutionally in the hands of the Chamber of Deputies, while jurisdiction over taxation and other fiscal legislation is legally shared with the Senate (see ch. 13, The Governmental System).

In practice, initiative in fiscal matters is taken by the executive. Both the revenue and expenditure bills are prepared for introduction to the congress by the Ministry of Finance and Public Credit (Secretaría de Hacienda Y Crédito Público). The fiscal laws prepared by the Finance Ministry are generally prepared in a manner to assure the approval of the legislators. Moreover, the Mexican system of code law allows the president, typically working through the Finance Ministry, to issue *reglamentos* (detailed administrative regulations) for the execution of the budgetary laws. These *reglamentos* are an executive interpretation of legislation, often issued shortly after the promulgation of a law. Over the last three decades the legislators have made no major legislative change in the president's budgetary recommendations to the congress.

The Law of Revenues is a detailed statement of expected revenues, classified into three broad groupings: "ordinary income," made up of taxes, duties, fees, and other such federal receipts; "extraordinary income," made up of governmental borrowing and financing; and "other income," accruing from decentralized agencies and other governmental enterprises, the activities of which came under budgetary scrutiny and control in 1965. The Law of Revenues is not a tax law. Tax laws, together with the relevant rate structures, are enacted independently and individually, and need not be readopted so long as they are listed yearly in the Law of Revenues.

The Law of Revenues is prepared by the Revenue Department of the Finance Ministry and must be initiated in the Chamber of Deputies before the expenditures budget. The lower house is to give prompt attention to the revenue legislation both in committee and on the floor so as to pass the bill to the Senate for immediate consideration. This rapidity of action was required in order to assure expenditures budgets based on legally available resources. The budgetary timetable allows only 2 weeks of legislative consideration for the two fiscal bills.

The taxpayers' voice in budgetary policy decisions comes from the National Chamber of Taxpayers (Cámara Nacional de Causantes), a national organization of taxpayers (generally representing larger, more organized interests to the exclusion of smaller, individual taxpayers) which advises the government on tax matters. In general, public access to the tax policy decision-making process is limited.

Under Article 1 of the budget law, the Finance Ministry prepares and executes the expenditures budget. It determines the exact amount to be included annually in the expenditures budget for each of the federal dependencies; revises budget estimates presented by the Ministries and Departments, increasing or decreasing their totals in line with the administrative program of the President; prepares the initiative for the expenditures budget according to the initiative and its implementing *reglamentos;* enforces strict execution of the expenditures budget and establishes *reglamentos* for its administration; provides previous authorization for payments of disbursements of funds within the terms of the expenditures budget, with such exceptions as may be provided in the *reglamentos;* determines the legality of contracts and other acts imposing fiscal obligations on the state, and authorizes them within the terms of the budget; examines and authorizes credits against the federation; studies administrative organization, coordination of functions, and the classification of personnel, preparing breakdown of public service costs in order to determine cost-effectiveness and issues instructions for the preparation and execution of the expenditures budget.

To fulfill these obligations the Finance Ministry has a Sub-Ministry for the Budget to coordinate the administration of the income and expenditure laws (see fig. 17). Under this Sub-Ministry are several agencies grouped in an Expenditures Bureau (Dirección General de Egresos), including an office for the preparation of the Law of Expenditures, one for its administration, a legal office, and a personnel office. The Technical Office of the Budget (Oficina Técnica del Presupuesto) compiles the budget estimates and the justifications supplied by budget officers of the various national agencies, including the autonomous and decentralized ones. The Technical Office has the final voice in determining estimates, including those assigning budgetary allotments to the legislative and judicial branches.

The budgetary cycle is initiated by the presentation of preliminary budgetary estimates by each ministry, department, and agency by July 31, of each year. On September 1 the Technical Office issues an

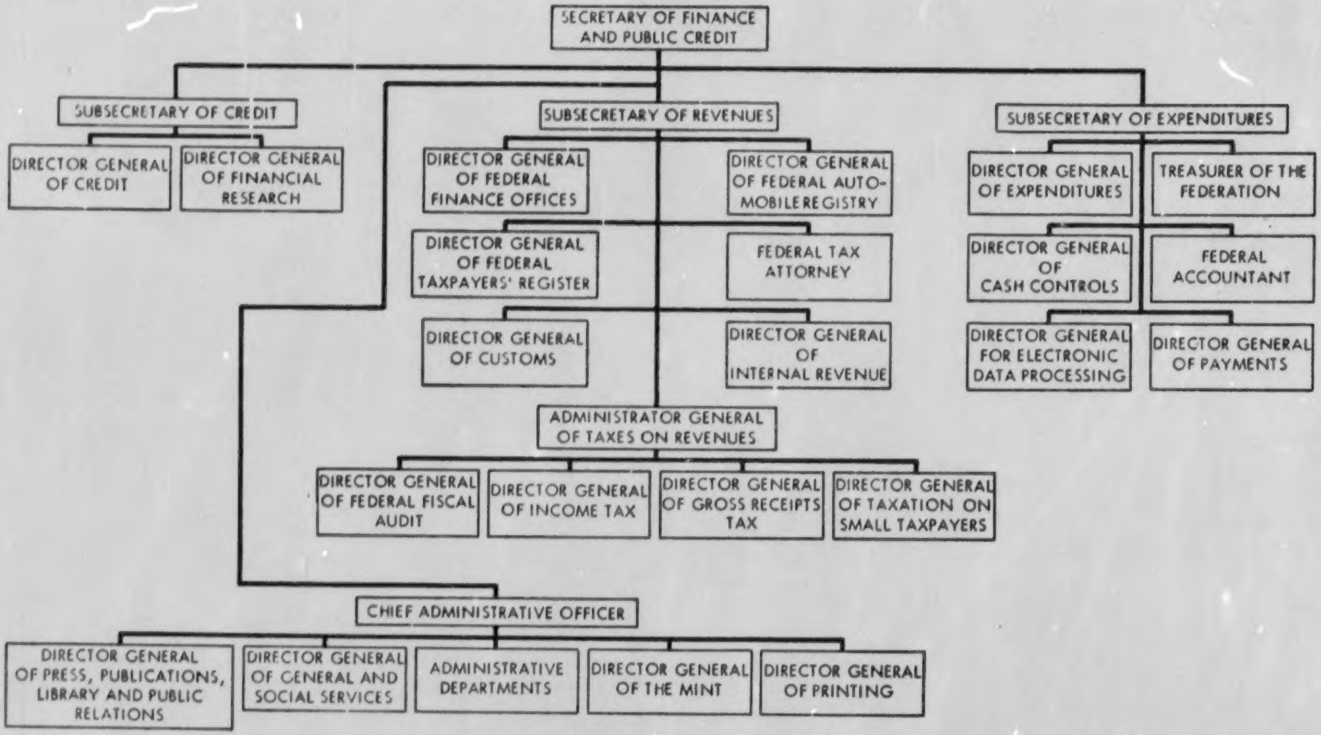
SECRETARY OF FINANCE AND PUBLIC CREDIT
SUBSECRETARY OF CREDIT
DIRECTOR GENERAL OF CREDIT
DIRECTOR GENERAL OF FINANCIAL RESEARCH
SUBSECRETARY OF REVENUES
DIRECTOR GENERAL OF FEDERAL FINANCE OFFICES
DIRECTOR GENERAL OF FEDERAL AUTOMOBILE REGISTRY
DIRECTOR GENERAL OF FEDERAL TAXPAYERS' REGISTER
FEDERAL TAX ATTORNEY
DIRECTOR GENERAL OF CUSTOMS
DIRECTOR GENERAL OF INTERNAL REVENUE
ADMINISTRATOR GENERAL OF TAXES ON REVENUES
DIRECTOR GENERAL OF FEDERAL FISCAL AUDIT
DIRECTOR GENERAL OF INCOME TAX
DIRECTOR GENERAL OF GROSS RECEIPTS TAX
DIRECTOR GENERAL OF TAXATION ON SMALL TAXPAYERS
SUBSECRETARY OF EXPENDITURES
DIRECTOR GENERAL OF EXPENDITURES
TREASURER OF THE FEDERATION
DIRECTOR GENERAL OF CASH CONTROLS
FEDERAL ACCOUNTANT
DIRECTOR GENERAL FOR ELECTRONIC DATA PROCESSING
DIRECTOR GENERAL OF PAYMENTS
CHIEF ADMINISTRATIVE OFFICER
DIRECTOR GENERAL OF PRESS, PUBLICATIONS, LIBRARY AND PUBLIC RELATIONS
DIRECTOR GENERAL OF GENERAL AND SOCIAL SERVICES
ADMINISTRATIVE DEPARTMENTS
DIRECTOR GENERAL OF THE MINT
DIRECTOR GENERAL OF PRINTING

Figure 17. Ministry of Finance and Public Credit of Mexico.

Instructivo (Instructions) on the technical preparation of the budget, setting up a classification code for budget items to facilitate the checking of each type of expenditure. Legally, the budget is specific, not general, although in practice, though salary lines are itemized, performance items are not. Article 65 of the Constitution provides that a written order of the President is required to authorize the use of secret funds. Within a month of publication of the Instructivo, each governmental agency is informed of its tentative budget allotment, including a breakdown by internal subdivision.

By November 1 the various agencies return their estimates, revised in light of the Instructivo. In turn, these estimates are reviewed by the Technical Office and readjusted to bring them into line with the president's fiscal and economic programs. By December 1, the agency heads must present their final estimates, revised to fit the budgetary adjustments, or seek amendments to the rulings of the Technical Office. Amendments are obtained through a consultative Permanent Budget Committee, chaired by the Director General of the Expenditures Bureau. Once heard, however, an agency is prohibited by article 25 of the budget law from taking its case to the congress to bring about changes in the executive budget. If any agency fails to present the required information by December 1, the Technical Office provides its own estimates. The final budget is then prepared for presidential approval.

The Constitution empowers the congress to approve the budget, but neither the legal system nor the political structure leave it much room to exercise that function independently. Article 21 of the budget law requires that the expenditures budget and the revenue budget, be in the Chamber of Deputies no later than December 15, and that the revenue budget be acted upon immediately and sent to the Senate. The expenditures budget is under the sole jurisdiction of the Chamber of Deputies. The budgets are generally not relinquished by the Finance Ministry before December 15, the legislative session ends on December 31, and the fiscal year starts the next day. Moreover, there is typically an end-of-session legislative logjam, compounded by the introduction, late in the session, of major bills that must be got through. What time exists is further curtailed by the normal Christmas recess.

There are structural and procedural limitations as well. Any suggested changes or additions to the budget while it is in committee must be accompanied by a provision for new sources of funds if the addition or change would result in a budgetary imbalance. As the budget, when received from the Finance Ministry, is formally closely balanced, the degree of freedom for legislative action is curtailed. Moreover, once the budget is out of committee, individual legislators are prohibited by the budget law from introducing new amendments on the floor of the Chamber. If congress failed to assign compensation for a position established by law, such a post would receive the pay provided in the previous budget.

Although the budget laws imply that review of various aspects of the fiscal laws will be taken up in the relevant subject matter committees in the Chamber of Deputies, in practice this does not happen. The revenue and expenditures initiatives are all in fact sent to the five-member Committee on Budgets and Accounts, the principal money committee of the Chamber. The Committee must issue a report within 30 days, and this report is the basis for floor action. Not only does the late introduction of the budget by the Finance Ministry reduce the 30-day maximum Committee review period, but the virtually simultaneous introduction of the budgets of the Federal District and the national territories and the auditor's report on the execution of the previous year's budget limits the depth of the Committee review and study processes.

The Committee's effectiveness is further reduced by its small size and its lack of continuity and experience—a result of the one-year limit of the terms of its members, who may not serve two terms successively. Coupled with the committee's lack of a permanent technical staff and the impossibility of amendment on the floor of the Chamber once the budget is out of committee, the legislative procedures ensure the almost total dominance of the budgetary process by the executive branch. The president has an item veto by which he can influence fiscal legislation, but this has seldom been used.

Execution of the budget in Mexico is controlled by the president, aided by the Expenditures Bureau, although a final review of fiscal activities is in the hands of the Chamber of Deputies. Aside from the control it exercises in the preparation of the budget, the Expenditures Bureau has authority over spending through the activities of several of its affiliated offices. As a method of administrative pre-audit to assure that the order to pay is in accordance with a budgeted item, technical validation vouchers and claims must be obtained from the Office for Control and Vigilance of the Budget by every agency head prior to every payment. The Accounting Office of the Expenditures Bureau, in turn, makes an accounting review of payments. The Office of Contracts, Compatibility, and Payments handles budgetary legal matters, while all classification and personnel matters are handled by the Office of Registration of Federal Personnel. Finally, with the exception of so-called "minor items," purchasing is controlled by the Ministry of the National Patrimony.

The Federal Accounting Agency, a dependency of the Finance Ministry separate from the Expenditures Bureau, is responsible for the annual legislative postaudit of the budget prepared for the Committee on Budgets and Accounts of the Chamber of Deputies. The Accounting Agency is an auxiliary of the legislative branch, which annually elects an Inspectorate—aided by a group of accountants—to oversee it. The Inspectorate is responsible for overseeing the activities of the Federal Accounting Agency as it prepares the audit. Thus, legislative review is not limited to the legality of fiscal acts but extends to an approval of budgetary adherence and justification of expenditures. Typically, this review process runs a year beyond the termination of the relevant fiscal year.

Paralleling the legislative accounting control of the budget is control of a somewhat different nature exercised by various ministries, most particularly by the Ministry of the Presidency and the Ministry of the National Patrimony. This control encompasses the totality of spending of the federal public sector, which is to say, both that of the federal government and of the decentralized agencies and state participation enterprises.

The Ministry of the Presidency controls both the preparation of the general plan of public expenditure and investment by the federal government and over the coordination of the investment programs of various dependencies. At the same time, it plans and supervises the investments of the decentralized agencies and state enterprises.

Under the new law for control by the federal government of the decentralized agencies and state participation agencies, the Ministry of the National Patrimony is empowered to review the budgets and annual operating programs of these agencies and to oversee their fulfillment. The Ministry must review the systems of internal accounting, control, and auditing of these agencies and, together with the Ministry of Finance, give its approval for audits to be published officially. To better control the activities of these dependencies, the Ministry may set up continuing audits and technical inspections or, if necessary, initiate the restructuring of these agencies.

The first five articles of the *reglamento* to the budget law deal with limitations on expenditures. Budget estimates of salaries and fixed costs must be divided into 12 equal monthly parts for payment, and other types of costs are allocated, where possible, on a quarterly basis. Deviations from the prescribed procedures require permission from the Expenditures Bureau. Nonitemized budgetary appropriations can be spent only in accordance with subsidiary internal budgets prepared by the federal agency concerned and approved by the Finance Ministry.

Where budgeted funds prove insufficient, deficiency appropriations are possible under the law. They are seldom necessary. In practice, the executive may modify considerably the budgetary estimates approved by congress. Since budgetary estimates of fiscal revenues are extremely conservative and make only a nominal provision for the use of the federal borrowing power, the executive branch has wide latitude. Actual outlays are consistently in excess of congressionally approved budgets. Thus, in 1966 the published budgetary estimate of direct federal expenditures, amounting to 20.1 billion pesos, was subsequently increased by 95 percent to a total of 39.3 billion, and actual expenditures as revealed by the national accounts were 32.5 billion—61 percent above the congressional budget. Although a considerable proportion of this inflation of the budgetary figures merely reflects refinancing of the public debt, this is not true of outlays covered under such headings as "additional expenditures" (which were increased by over 6 billion pesos in 1965 and almost 4 billion pesos in 1966).

CHAPTER 25

BANKING AND CURRENCY

The monetary and financial system of Mexico has grown rapidly and without significant inflation during the 1960's. This growth has been both in size and in complexity. The system has achieved a level of sophistication that is unrivaled in developing nations of the world. The Mexican peso, which since 1954 maintained its value at 0.0710937 grams of fine gold and its parity of 12.50 pesos to the U.S. dollar, has steadily approached the stage of becoming an international "hard" currency. The strength of the currency has continued even complete freedom to convert pesos to foreign exchange and take such foreign money out of the country. In other Latin American countries and even in Mexico in time past this freedom would have contributed to monetary instability and external imbalance. In fact, Mexico and Switzerland are among the few nations that have maintained free convertibility during most of this century and, it was in keeping with this position that Mexico was an original subscriber to Article VIII of the Fund Agreement of the International Monetary Fund. The Mexican peso is now highly regarded in international monetary circles.

In the 1960's the base of financial institutions upon which the strength of the peso has been wrought developed greatly both in complexity and in sophistication. The low level of inflationary pressures exerted on the economy since 1954 has allowed a broad elaboration of financial institutions and instruments.

By the mid-1960's the use of money and the acceptance of the practice of borrowing and lending, had reached most of the country. Various institutions designed to bring together savers and investors, borrowers and lenders have been developing rapidly over the last 25 years. The growth rate of assets in credit institutions has averaged nearly 20 percent per year since 1940. There has been a similar rate of growth in capital formation during this period.

The changes in the monetary and financial system indicate that Mexico has recently entered a critical intermediate stage on the path to a truly industrialized economy. Some signs of this are the greater use of savings deposits, insurance, and corporate stock, and the growing level of capital formation and investment.

Until recently the monetary and financial system has been almost the only policy tool in the development of the Mexican economy. The banking and credit structure has become the agency through which the government determines the resource allocation in and direction of the economy. Authority for planning and programming lies in the person of the President of the Republic and his Minister of Finance. The broad elements of the desired program are passed on to the Banco de México, Nacional Financiera, and the various commissions to refine and elaborate. The actions of these agencies determine the reactions of both the public and private credit institutions.

The public credit institutions are a set of national development banks and auxiliary organizations. They provide low-cost credit and technical advice to areas determined politically to require special consideration. The institutions are part of the system of *empresas de participación estatal* or state participation enterprises. These are created in the form of a private corporation but controlled by the state through majority stock ownership. The private credit institutions, on the other hand, while not directly a part of the political hierarchy, are nevertheless effectively constrained by it. This is done through a structure of security and credit controls. These controls direct the funds toward activities deemed of special public importance by the governmental policy makers.

The financial structure of Mexico has changed drastically since 1925, when the Banco de México was instituted. At that time, 90 percent of the total assets of all financial institutions were controlled by private institutions. By 1940, 55 percent of the total financial assets were controlled by public institutions. Today the total assets of all financial institutions are nearly equally divided between the public and private sectors. Since 1940 moreover, private and specialized public lending institutions, such as the *financieras* and national development banks, have become steadily more important as sources of credit to government and public and private enterprises (see table 47). Nevertheless, governmental participation in the monetary and credit system has meant that the political system influences strongly the allocation of resources within the economy.

HISTORICAL BACKGROUND

Pre-colonial and Colonial System

The indigenous cultures of Mexico early discovered the problems of bartering—locating coincident wants and dealing with people of different languages and cultures. Media or commodity money evolved naturally.

Cacao, cotton goods, corn, and gold were the first used. The use of cacao as a medium of exchange was more than a localized tradition

Table 47. Mexican Banking System—Loans and Investments Outstanding[1]

[As of December 31, 1967]

Lender	Millions of pesos[2]				Percent			
	1961	1963	1965	1967	1961	1963	1965	1967
Commercial banks	9, 491	13, 365	20, 012	25, 239	21. 3	22. 4	23. 5	20. 8
Other private credit institutions	10, 668	15, 962	25, 235	45, 624	24. 0	26. 8	29. 6	37. 7
National credit institutions (excluding Banco de México)	17, 548	21, 915	29, 656	42, 714	39. 4	36. 8	34. 9	35. 3
Banco de México	6, 808	8, 374	10, 333	7, 327	15. 3	14. 0	12. 0	6. 2
Total	44, 515	59, 616	85, 236	120, 894	100. 0	100. 0	100. 0	100. 0

[1] Excluding interbank transactions.

[2] 12.5 pesos = US$1.

Source: 1961, 1963, and 1965 adapted from "The Mexican Economy," *El Mercado de Valores*, Special Supplement, December 5, 1966, p. 27; 1967 adapted from Banco de México, Annual Report, 1967, pp. 30–31.

and was still used well into the 20th century in the more remote areas of southern Mexico.

The Spanish found trading to be extremely awkward because while the Indians were used to transacting in terms of measure and number, the Spanish customarily exchanged items on the basis of weight. The Spanish referred to their coinage in terms of *peso de oro* or *peso de plata*, that is, in terms of "gold weight" or "silver weight," hence the word "peso," used today to designate the basic monetary unit of Mexico.

In 1535 the Casa de Moneda, the Mexico City Mint, was founded. The first coinage law allowed only the coining of silver. The original *peso* was so crude as to allow easy debasement and counterfeiting. Finally, in 1728, official corruption and currency devaluation induced a royal ordinance which took the mint out of private hands, enlarged it, and regularized and refined the coinage. The Mexico City Mint was the largest in the world by the end of the 18th century.

Over 98 percent of the colonial coinage was shipped abroad. Thus New Spain was to be haunted by a money shortage, in large measure due to the royal remittances demanded by mercantilist Spain. Moreover, the currency shortage was aggravated by large fluctuations in money supply. This was due to the twice-yearly departures of the Spanish galleons from the ports of Veracruz and Acapulco. This brought 3-month periods of precipitously falling prices and frequently a halt of trading in Mexico City.

By 1800 it was judged that no more than 10 percent of the trade in New Spain was transacted in official currency. The vast majority of exchanges were carried out by means of barter, cacao currency, and a copper trade money called a *talco*, originally issued by individual saloons and storekeepers. The lack of money meant that credit institutions were few and rudimentary throughout most of the colonial period. Merchants and individual capitalists, *aviadores*, accounted for a small amount of short-term, high-interest lending, generally extended in the form of partnerships in mortgage loans.

Aside from these sources, the most important credit institution of the colonial period was the Catholic Church, whose mortgages at a uniform 5 percent rate of interest were usually the only source of credit to the large landholders.

Two large-scale financial institutions were founded toward the end of the period of Hispanic dominance, one of which a national pawnshop, the Monte de Piedad de Ánimas, was created to make interest-free loans to the poor and is still in existence today in various parts of Mexico.

From Independence to the Revolution

Independence from Hispanic rule in 1821 did little to change the structure and functioning of the financial system of Mexico. Money remained scarce, and exchange was largely carried on through barter and unofficial commodity currencies. This currency shortage slowed the development of financial institutions and resources over the next 50 years.

Some abortive attempts were made early in the period of Santa Anna's dominance to develop a more adequate monetary and banking system but these failed because of a lack of sufficient government support and the strains put on the system by the Mexican-American War. No further financial development occurred for almost 25 years. The principal sources of credit in the interim were those of the colonial tradition, namely wealthy individuals, commercial establishments, and the Church.

It seems inevitable that the first large source of capital in Mexico came from foreign enterprises. Local funds were scarce, and the country lacked exeprience in and knowledge of the ba[illegible]ng function. Thus, during the French occupation under Maximillian in 1864 the first private Mexican commercial banking institution was established, the British-financed Banco de Londres, México, y Sudamérica. It was the Banco de Londres that introduced the use of bank notes into the Mexican economy. While no longer a bank of issue, and having changed its name to the Banco de Londres y México, it is still today one of the major commercial banking institutions in the country.

During the next 20 years the number of private commercial banks increased rapidly. This period of "banking anarchy," produced a flood of paper currencies, fed by private banks issuing their own notes, threatened a full-fledged financial crisis. The international monetary crisis of 1884 produced a panic in Mexico as holders of paper currencies triend to convert bank notes into landholdings, jewelry, coin currencies, and domestic deposits of foreign exchange. Despite government attempts to restrict note-issuing authority private issuance of paper money under special concession from government remained characteristic of the Mexican monetary structure up to the Revolution.

The banking system, together with the many concessions granted by the government, became highly confused and approached chaos during the late 1880's and the early 1890's. These problems were compounded by the growing international demonitization of silver that had begun in the 1870's. The gold value of silver declined, and with it the external value of the Mexican peso, subjected to the vagaries of U.S. silver policy; a case in point was the financial panic and subsequent depression of 1893–1894.

Again the government tried to stem the adverse effects of these crises on the Mexican economy. In particular, an effort was made to encourage institutions providing long-term credit and to restrict currency creation by private commercial banks whose credit activities were limited mainly to short-term loans.

Nevertheless, banks lacking the power to create money continued to lag well behind those with this power, given the economic circumstances of the time. There was insufficient financial saving to support the operations of a true long-term credit institution, whereas commercial banks, to the extent that they could gain public acceptance of their liabilities as a medium of exchange, could exist and grow when other forms of financial institutions could barely survive. Moreover, the frequent monetary crises made it difficult, if not practically impossible, for any more than short-term liabilities to become acceptable in the credit market. Thus only commercial banks of issue could establish themselves strongly in Mexico before the Revolution.

Both the failure of the 1905 attempt to switch the system to a gold basis and the 1907 financial crisis caused by depressed world prices for Mexico's exports brought the banking system to its knees. Insufficient reserves and heavy bad-debt losses caused widespread commercial bank failures despite efforts on the part of the government to support the banks. Moreover, the financial system became a symbol of foreign domination and special privilege among the revolutionary elements of Mexican society. The foreign orgin and foreign orientation of the banks wounded the growing nationalistic pride.

From the Revolution to 1940

The opening years of the Revolution brought no greater disorder or damage to the existing banking structure than had the immediately preceding years. However, in 1915 banking charters were revoked and in 1916 all banking laws were rescinded. In 1917 the government borrowed the remaining metal reserves of the banks to meet pressing fiscal demands. For a period of some 5 years Mexico had no functioning domestic banks.

The revolutionaries were forced to resort to the printing of large sums of paper currency to finance their battle to win the country. It soon became evident that the power to print money conferred on the government the means of gaining control over real resources to affect political and social changes but, if used to excess, it could result in the collapse of the currency and the loss of that power because of widespread antipathy to paper money. The realization of this potential power, together with the revolutionary abhorrence to delegate this power with no compensation, led to the governmental appropriation of the sole right to issue paper currency. This authority was conferred through Article 28 of the Constitution of 1917 on a single bank, to be established and controlled by the federal government. Thus, the private banks lost their power to print money.

In 1925, the basic ideas of finance minister Alberto Pani were incorporated into a law creating the Banco de México. This was a central bank whose powers were severely limited beyond the point of its monopoly of note-issuance power. Commercial banks (*bancos de* *depósito*) were thus authorized to receive demand deposits and issue loans only at short term, as had been the case before 1910; specialized banks and institutions were authorized to handle time deposits and medium- and long-term loans. The Banco de México was entrusted with the management of the nation's gold standard (returned to in 1917), issuance of notes, and the rediscounting of commercial paper.

Even before the onset of the Great Depression, Mexico's internal monetary situation began to deteriorate. In 1931, money became scarce and the internal depression and external pressure on the peso became worse. The one change of future structural importance occurring was the initial crumblings of the resistance of private banking institutions to association with the central bank, due to the competitive limitations imposed on the Banco de México and the provision of a preferential discount rate for associated banks.

Subsequent changes in both the approach to monetary policy and the internal banking structure that proved to be the foundations of the present system. New laws were passed in 1932 creating the legal basis of the present structure.

In essence, these laws made the Banco de México a true central bank and, together with the legal revisions of 1936 which brought virtually all credit institutions under central bank guidance, the laws allowed the government to exercise significant control over credit expansion. This would help the government to finance economic development at home and provide for the stability of the peso abroad. The country's colonial heritage was imbued with substantial economic activity and direction by the state. Few of the programs adopted as a consequence of the Revolution are without precedent in either the period of Spanish dominance or the 19th century.

Financial policy, dictated generally by the objectives of the Cárdenas development plans, was crudely inflationary during the latter half of the 1930's. Given the policy choices made and the circumstances, it is difficult to conceive of any other possible mode of attack. The Mexican investor was supposedly drawn not to liquid savings, but rather, by "traditional" preferences, to land, urban real estate, jewelry, and domestic holdings of foreign exchange and coin hoards. This preference pattern was more highly influenced by monetary instability and inflation in a narrow securities and investible-funds market than by "custom and a taste for luxury." The private financial institutions were still weak. They lacked assets (their total resources being less than ten percent of Mexico's gross national product) and were almost totally restricted to short-term lending by law, custom, and former inflationary experiences. There was little chance of financing the increased public expenditures either through taxation, because of the then small taxable base, or through selective credit controls, because of the narrow, small investible funds market.

ROLE OF GOVERNMENT

Control of the Financial System

The inclusion of direct controls over the banking structure within the political system was viewed as the best way to assure effective implementation of basic social and economic policy decisions (see ch. 18, Character and Structure of the Economy). For development purposes the Cárdenas government had come to rely on qualitative credit controls whereby specialized development banks were used to limit credit availability to various claimants within the economy.

A further degree of political control was gained when the Secretaría de Hacienda y Crédito Público (Ministry of Finance), together with the Banco de México, developed a system of banking and securities commissions and committees that were charged with coordinating and supervising credit activity in Mexico. The final element in the evolution of political control over the Mexican financial structure was the establishment in 1948 and 1949 of reserve requirements governing the division of bank assets in various types of securities and other credits. At first this applied only to commercial banks, but by 1960 it affected virtually all private banking institutions. By means of these selective credit controls the political system, by way of the Secretaría de Hacienda and the Banco de México, came to influence directly the allocation of credit resources of the banking system between competing claimants within the Mexican economy.

Coordination of Banking Activity

To coordinate banking activities, the government makes extensive use of interagency commissions or committees, composed of relevent ministries and decentralized agencies. These are fitted together to carry out a general program which has been demanded of them by the President of the Republic. A case in point was the plan laid out and initiated in 1953 by President Ruíz Cortines and his Secretary of Agriculture. This was a plan to make Mexico self-sufficient in basic foodstuff production and, in particular, in the production of meat, milk, corn, wheat, and beans. The program brought together the Banco de Comercio Exterior, which provided large credits for price stabilization in the basic commodities; the Banco Nacional de Crédito Ejidal, which established credit at differential rates in favor of corn and beans, commodities typical of the communal Indian *ejidos* of the southern highlands; and the Banco Nacional de Crédito Agrícola, which would provide intermediate-term loans only for irrigation projects, land clearing, and capital equipment that was for basic foodstuff production.

Even at the local level, programs are developed using considerable bank and ministerial coordination. A case in point is the *juntas de* *aqua* or local water boards. They are composed of farmers, local irrigation systems, the *ejido* and agrarian banks, and the Ministeries of Agriculture and Water Resources. But, perhaps the most interesting program of all is the combining of the current policy of minimizing inflationary pressures with an agricultural price-support program which had previously been operated through directly monetized product purchases (see ch. 19, Agriculture).

The offshoot of these programs is that the banks are often, as they were in the late 18th and 19th centuries, considered appropriate repositories for a wide variety of administrative responsibilities, including technical assistance, research and development, supervsion of government enterprises, and the promotion of Mexican products abroad. Importantly, however, the bank managers in this structure do not conceive of themselves as possessing policy-making competence; rather, they see themselves as part of an administrative hierarchy whose chain-of-command stems from the office of the President of the Republic and his appointed ministers.

PUBLIC INSTITUTIONS

The public financial structure developed during the 1930's has been less changed than refined after 1940. Only six additional national development banks have been established, and these are essentially designed to fit the demands of special interest groups, such as the military, the motion picture industry, the sugar industry, and the Mexico City taxi drivers (see ch. 20, Industry). The major share of growth in total assets of public banking institutions has been accounted for by the Banco de México and Nacional Financiera, the former accounting for about 40 percent and the latter for about 20 percent of such total assets. In fact, these two institutions have come to exercise a dominant influence in the financial market.

Despite the relative decline in its assets, the power of the Banco de México has been increased through the bestowal of administrative control over the complex system of primary and secondary reserve requirements. These became applicable not only to commercial and savings banks but also to the *financieras* or private investment banks. The Nacional Financiera has become increasingly important after 1940 because of the growth in its resources and the progressive enlargement during the late 1950's and early 1960's of the *fondos* or public trust funds subject to its administration. Its capacity as guarantor, largely through the *fondos*, of the domestic and foreign indebtedness of a variety of public and private enterprises has been extended.

Not only do they enjoy power through the amount of resources they control and the legal authority they command, but these two banks, together with the Banco de Comercio Exterior and others employ much of the outstanding professional economic talent in Mexico. This concentration of economic expertise probably is due to an amalgam of a sense of professional achievement, high salaries, and the possibility of the attainment of a political position through direct contact with the government.

The major share of the resources of publicly-owned financial institutions is derived from federal funds, foreign credits, and Banco de México rediscounts. A relatively small proportion of funds for the specialized public credit institutions has been derived from competition for funds in the domestic market. Some development banks and Nacional Financiera, in particular, have raised funds through *certificados de participación*, a special form of fixed-yield security. Even though moderate amounts of public loans are extended to support small businesses, foreign trade, residential construction, and the extension of social services, the major portion of the resources held by publicly-owned financial institutions is used to finance industrial and agricultural activities.

Banco de México

The Banco de México, Mexico's central bank, derives its legal existence from Article 28 of the Constitution of 1917 which provides for "the issue of notes through the medium of a single Bank, which the Federal Government will control. . . ." The central bank as such was created in 1925 with the promulgation of the Ley Orgánica del Banco de México; but, it is the third revision of the Ley Orgánica, passed in 1936 and revised in 1941, which is the presently controlling piece of legislation. This law provides that the functions of the Banco de México shall be:

1. The regulation of the domestic money supply
2. The regulation of the foreign exchange market
3. Service as a reserve bank and discount house for private deposit banks and other designated financial institutions
4. The establishment and administration of reserve requirements of associated institutions
5. The establishment of policies governing the activities of the Comisión Nacional Bancaria (National Banking Commission)
6. Service as the fiscal agent of the federal government.

The central bank is also authorized to regulate directly interest rates paid on time deposits. The bank is owned jointly by the federal government (51 percent) and by various "associated" institutions, which hold the rest of the outstanding stock in proportion to their capitalization. Its director is appointed by the President of the Republic, and his term usually corresponds to the 6-year term of the president who appointed him. In 1968, the incumbent, Rodrigo Gómez was serving his third 6-year term. The Banco de México, as central bank, has primary responsibility for both the formulation and execution of monetary and financial policy in consultation with the Minister of Finance, the highest authority on monetary and credit policy. In reality, the central bank adapts its operations to the requirements of government policy directives; its own recommendations are usually the monetary policies put into practice.

In general, expenditures in the public sector have exceeded receipts so that a characteristic feature of fiscal policy is that it gives rise to a continuing need for financing public sector debts. As the agency, along with Nacional Financiera, directly responsible for debt management, the Banco de México must relate its operations closely with those of the fiscal authorities. This, together with their dominant position in the money and capital market, means that Nacional Financiera and the central bank must maintain close coordination of their activities (see ch. 24, Public Finance).

Although the banking, securities, and insurance commissions are not subordinate to the Banco de México, the bank is capable, through its membership on the commissions, of exercising a dominant influence on their activities. The director of the central bank regularly consults with both the chairman of the National Banking Commission, to insure coordinated supervision of banking system institutions, and the chairman of the National Securities Commission, to assure its actions lead all participants in the money and capital markets to legal compliance with government credit policy.

In line with its controlling position with regard to the direction and extent of the flow of funds in the economy, the Banco de México has direct jurisdiction over the activities of four *fondos*, or public trust funds, created to augment the flow of credit to agriculture, residential construction, and exporters of manufactured goods. These *fondos* are used as a means of providing private institutions with guarantees against default on the part of borrowers in these specific activities and also as a source of financing for discounting of paper acquired by private institutions in extending credit to these borrowers.

In accordance with legal requirements the Banco de México, in order to support the value of the peso, must maintain a monetary reserve equal to at least 25 percent of total currency in circulation and sight obligations of the central bank. At least 80 percent of such reserve must consist of gold or foreign exchange, the remainder in silver. As of August 1966, the ratio of monetary reserve to currency in circulation and sight obligations was 44 percent, and the reserve consisted of 90 percent gold and foreign exchange. In pursuing its legal charge to regulate the Mexican foreign exchange market, the director or a representative of the Banco de México commonly sits as advisor to the Minister of Finance when the latter is acting as Mexico's chief representative to the International Monetary Fund (see ch. 23, Foreign Economic Relations).

Nacional Financiera (NAFIN)

Nacional Financiera was orginally created in 1934 to help restore liquidity to the banking system. Its basic objectives were the subsidizing, colonizing, and selling of real estate that had been taken over by various institutions in the banking system. In 1940, a reconstruction and change of NAFIN was brought about by the Ley Orgánica de la Nacional Financiera, S.A. The objectives of the bank were redefined in Article 20 of the this new organizational law as follows:

1. Oversee and regulate the national securities and long-term credit market
2. Promote the investment of capital in all classes of enterprises in the country
3. Act as an institution of support for investment companies when they issue credit guaranteed by securities
4. Oversee and direct the operations of the stock exchange
5. Act as finance or investment company
6. Act as fiduciary, especially of the federal government and its dependencies
7. Act as agent and advisor of the federal government, of the states, municipalities and official dependencies in the issuance, recall, conversion and so forth, of public securities
8. Be legal depository for all classes of securities.

This reorientation toward industrial promotion had a tremendous effect in terms of the bank's growth. Today NAFIN is by far the largest and most important public credit institution in Mexico. Its importance as a source of funds to the Mexican economy is emphasized by the fact that by 1965 NAFIN accounted for approximately three-quarters of the long-term credit in the economy. This long-term credit—the bank theoretically does not grant short-term loans—accounted for nearly a third of all the long- and short-term credit granted by all banking institutions, public or private.

NAFIN functions principally as a development bank and is the major supplier of funds for industry. Also, NAFIN is a major issuer of securities. Perhaps the most important activity undertaken in its first year under the new Ley Orgánica of 1940 was the formation or creation of various industrial projects and firms. This promotion of specific industries, practically all of which were and still continue to be joint ventures with private capital, was undertaken in areas in which the private sector could not or would not provide the necessary capital and/or in which profit opportunities did not exist for private capital (see ch. 20, Industry).

A shift in policy took place in 1947 with the passage of the so-called "Reform Law" of the Ley Orgánica controlling NAFIN. The shift was from industrial promotion to more protection of private industry, with emphasis on aiding investment in infrastructure and basic industry.

Article 5 of this "Reform Law" made it obligatory that NAFIN make every attempt to obtain private participation in any of NAFIN's promotional activities; the bank should not offer any financing until all available attempts at obtaining private financing had been exhausted. As a result, direct participation of NAFIN in industrial activity was curtailed substantially. Only at the specific request of the government and on occasions where private money seems loath to enter does NAFIN now enter into an industry, and efforts to obtain a controlling interest are of lesser importance to NAFIN.

By the beginning of 1964, NAFIN held stock in 47 companies, holding controlling interests of over 50 percent of the outstanding stock in 15 companies and large interests of over one-third the stock in 7 others, while it as well held the bonds of 15 other companies.

While one might expect a common outcry about political pressure and special privilege benefiting influential people with NAFIN, this has seldom been the case. Business executives in general seem to feel that companies associated with NAFIN neither receive any special tax exemptions or concessions or permits that could not be obtained by other companies in like circumstances. Most feel that political, social, and/or monetary influence played a role independent of associations with NAFIN, and, in fact, that association with NAFIN alone would not give any firm a competitive advantage. In large part, this may well be due to the fact that each company associated with the bank is required to have on its payroll a person recommended by Nacional Financiera. It is the duty of this employee to prepare and transmit a rather comprehensive monthly report to the "*departamento de control de empresas y relaciones industriales*" (the enterprise control and industrial relations department). This control exercised by NAFIN undoubtedly restricts the activities of associated firms to less risky ventures than would otherwise be the case were the control not there.

As Mexico's archetypal development bank, NAFIN provides a network of financial operations which mobilizes capital and brings it to bear on productive activity. NAFIN draws the major portion of the funds it has channeled into industry from the issuance of its own securities, through guarantees and endorsements, and from direct foreign loans (see ch. 23, Foreign Economic Relations).

Since NAFIN is also responsible for promoting the development of the securities market, how it issues its own securities tends to govern the structure of rates and maturities for the market as a whole. NAFIN serves as federal fiscal agent in the marketing of government securities, as well, and, in this capacity, it has guaranteed some 70 percent of the outstanding funded public debt of the federal government. In its fiduciary capacity, NAFIN has been given the task of supervising several *fondos* that have been established by the federal government to assist in the development of certain kinds of enterprises and areas. Like those of the Banco de México, the *fondos* under NAFIN's jurisdiction are meant to supplement the resources of established private credit institutions, for example, by reducing lenders' risk through guarantee arrangements.

Finally, NAFIN acts as the government's principal agent in securing and administering foreign loans and is responsible for exercising overall control of foreign credits to both public and private borrowers. In this capacity, NAFIN, with the guidance and advice of the Minister of Finance, negotiates loans with the Export-Import Bank, the International Bank for Reconstruction and Development, the Inter-American Development Bank, and the Agency for International Development. NAFIN is also the conduit for lending coming from foreign banks and organizations (see ch. 23, Foreign Economic Relations).

Banco Nacional de Comercio Exterior (BANCOMEXT)

The original function of the Banco Nacional de Comercio Exterior, established in 1935, was to act as the promoter, organizer, and developer of foreign commerce. This is still the fundamental purpose of the bank. Yet, BANCOMEXT has tended to enter virtually any area of financial activity that might be even remotely connected with Mexico's foreign trade position. It finances the production of potentially exportable items as well as items actually produced for export. It advises exporters, puts them in contact with foreign representatives and potential purchasers, and gives information and assistance on the means of transport and packaging of products. In this capacity, BANCOMEXT has been instrumental in the creation of companies facilitating maritime trade and has been given responsibility for managing government trust funds created for renovation of port facilities. BANCOMEXT also manages funds that invest in enterprises active in mineral exports.

The reduction in export activity during World War II resulted in a considerable increase in the purview of BANCOMEXT. Its activities now entailed financial support to the production of what were politically determined as "essential food articles," the maintenance of an agricultural price stabilization program (in coordination with other government agencies), and, more generally, the extending of financial support to the official program of development of agricultural products, especially of exportable commodities. This aspect of BANCOMEXT's operations has in turn led to concern about such things as techniques of agricultural production, producers' organizations, communication, and commercial policy. Of the total credit authorized by the bank, some 50 percent now goes to price regulation and about 25 percent each to production loans and for commercial purposes (see ch. 20, Industry).

National Agrarian Development Banks

Aside from regional banks, there are now three agrarian development banks (see ch. 19, Agriculture). One, the Banco Nacional Agropecuario, founded in 1965, is still too new to be adequately evaluated. The other two banks, the Banco Nacional de Crédito Agrícola y Ganadero (BANGRICOLA), founded in 1926, and the Banco Nacional de Crédito, Ejidal (BANJIDAL), established in 1935, are among the oldest, largest, and most important public credit institutions in Mexico. BANGRICOLA was the first of the national banks established by the government. It specialized in loans to small farmers. The majority of the bank's credits are in working capital loans. The main sources of its funds are the federal government, foreign credits, and domestic banks. BANJIDAL was created to aid farmers who work the communal lands of the Revolutionary *ejido* agricultural system. Both banks were originally highly centralized, but since the late 1950's, they have begun to set up a network of regional branches located throughout the country.

Agrarian credit policies involve both the "carrot" and the "stick" as a means of influencing agricultural development and of directing agricultural priorities toward national goals. Credit from both BANGRICOLA and BANJIDAL is used to enforce programs of technical assistance and advice. The allotments of total credit usually are made after the adoption and completion of specific techiniques by the producer. As a result, these banks have become central to the whole process of agricultural technical assistance in Mexico. Since harvests are generally the only effective collateral on loans, the banks have become engaged in the disposal of these harvests as a means of protecting themselves against loss. Thus, the agrarian banks have become deeply involved in regulating the conditions of sale of agricultural products. They own and operate processing plants and storage facilities, and participate in the government price-support programs. In effect, the market for agricultural commodities is tightly controlled.

Banco Nacional de Obras y Servicios Públicos

The Banco Nacional de Obras y Servicios Públicos was created in 1966 through the merging of the Banco Nacional Hipotecario Urbano y de Obras Públicas (BNHUOP) and the then liquidated Banco Nacional de Transportes. BNHUOP had become at the time of the merging in 1966 the second largest national development bank in terms of total assets. It was exceeded only by Nacional Financiera. Undoubtedly the general size and importance of the new Banco Nacional de Obras y Servicios Públicos will remain much the same as its predecessors, as likely will its activities. These consist of the financing of public works, federal and residential construction, and expanded private transportation facilities.

Other National Development Banks and Credit Institutions

There are five other national development banks that supply credit to areas that require special attention. The Banco Nacional de Fomento Cooperativo began operation in 1944. It provides credit for a number of cooperative societies set up during the 1930's. Substantial support from this bank now is directed to fishing, truck transport, sugar processing, and salt production, as well as small manufacturing enterprises. It administers a special trust fund extending credit and technological assistance to the large artisan portion of the Mexican population.

The Banco de Comercio de Distrito Federal was established in 1943 when inflationary conditions and shortages of consumer goods had caused the cost of living index in Mexico City to move up steeply. The bank was instituted as a means of providing special low-cost credit to the small merchants of Mexico City and to assist them in forming associations to reduce purchasing costs and in maintaining a "reasonable price level for the consumer."

The Banco Nacional del Ejército y de la Armada, founded in 1946, was originally organized to direct the savings of the military into productive channels. Today it is more generally concerned with consumer and mortgage loans for military personnel. The bank also manages an obligatory savings fund for enlisted men, administers the military life insurance program, and operates stores for military families.

The Banco Nacional Cinematográfico and the Financiera Nacional Azucarera are banks obliged to funding the development of the movie and sugar industries.

Aside from these national development banks, there are an important set of what are called "auxiliary credit institutions" functioning in the Mexican economy. The Patronato del Ahorro Nacional is a rapidly expanding organization for the special purpose of facilitating, protecting, and stimulating the savings of people who ordinarily do not have contact with savings organizations. The Unión Nacional de Crédito was specifically instituted to aid credit unions in general, and the Unión Nacional de Productores de Azúcar was instituted to aid the sugar industry in particular. The Nacional Monte de Piedad, the National Pawnshop is a savings and credit institution dating back to the colonial period.

PRIVATE INSTITUTIONS

The number of private financial institutions has grown more than four-fold from 1940 to the present. Except for the founding of some savings and loan associations in the 1950's, there has been no change in the types of credit institutions operating before 1940. More significant, however, has been the great increase in the number of branches and agencies of the existing institutions of which there were more than 2,500 in existence in 1965 as opposed to 63 in 1940. Even though the private banking system is very urban oriented, the distribution of a variety of credit institutions is now such that most borrowers and lenders throughout the country have access to the national money and capital market. A possible exception are the farmers who, at least on the *ejidos*, are in part hampered in obtaining credit due to a lack of collateral, because of the nontransferable nature of their property rights (see ch. 19, Agriculture).

Unlike those of the publicly-owned financial institutions, the resources of the private credit institutions have been mobilized almost entirely in the domestic market. Less than 10 percent each is derived from credits of the Banco de México and from foreign sources. Since the private institutions, unlike their public counterparts, are profit-motivated firms, changes in supply and demand conditions in the market and changes in the governmental policies governing their operations, influence both the sources, and uses of funds and their relative rates of growth.

Commercial banks and *financieras* are by far the most important private credit institutions in Mexico. Mortgage banks have maintained their relative position in the private credit structure, in large part due to the preference for their obligations among investors; but, their assets account for no more than 2 percent of those of all financial institutions. With the exception of the organized security exchanges and the private insurance organizations, other auxiliary financial institutions do not yet play a very significant role in the financial process.

There is a pronounced urban concentration in the activities of commercial banks and *financieras*. At the end of 1963 more than 80 percent of the credits and investments of private banks were concentrated in 10 large cities and fully 60 percent was in Mexico City alone. The sources of funds are somewhat less concentrated, the 10 largest cities providing about two-thirds of the demand deposits and some 40 percent of the time and savings deposits.

The commercial banking system is highly concentrated. Six leading institutions control some 60 percent of the assets of all commercial banks. Two of these, Banco Nacional de México and Banco de Comercio, control over 30 percent of the assets of the more than 100 commercial banks in Mexico. The commercial banks control most of the large *financieras*, holding some two-thirds of all their assets. An example of this financial concentration is the Banco de Comercio, one of the largest commercial banks in Mexico, which controls a group including the largest *financiera* in the country, one of the largest mortgage banks in the country, and a large insurance company.

The Mexican government has frequently called upon the leading financial groups, as representatives of the private sector, to extend their activities into industrial and commercial enterprises previously held by foreign firms. This, among other things, has led to large banking-industrial-commercial complexes whose cores are the financial systems mentioned above. Control of these giant economic groups is vested in about 10 or 12 families.

Also, there is a heavy dependence upon internal financing in the private sector. This is because most Mexican-owned business enterprises are closely held by a family or group; they would prefer not to deal with large, autonomous financial institutions. Certain enterprises, particularly in agriculture, residential construction, and small businesses, have only limited access to the money and credit market. Also, the cost of capital has generally been quite high, in large part due to the governmentally induced scarcity of funds.

Banking Institutions

The laws of Mexico that govern private credit institutions recognize seven different types of credit organization: *bancos de depósito* (deposit banks), *operaciones de depósito de ahorro* (savings banks), *sociedades financieras* (private investment institutions), *bancos hipotecarios* (mortgage banks), *sociedades de capitalización* (capitalization banks), *bancos de ahorro y préstamo para la vivienda familiar* (savings and loan banks), and *sociedades fiduciarias* (trust associations).

While legally treated as separate institutions, the functions performed by savings banks are usually combined as departments of deposit banks. These combinations constitute commercial banks whose facilities are similar to those provided by commercial banks in the United States, including checking accounts, savings accounts, trust operations, and loan departments. Nearly 70 percent of the resources of commercial banks are derived from checking and savings accounts, predominantly (55 percent) the former. These banks invest about 25 percent of their funds in bonds and stocks and about 50 percent in credits. The major portion of the credits are issued to businesses and individuals, 85 percent of which are short-term (less than one year). Commercial banks handle most savings and trust activities in the country, and are almost the only source of consumer loans.

The *financieras* are industrial investment of development banks. Because of the more long-term nature of their credits, they are probably of greater importance to the Mexican industrial sector than are the commercial banks. The private investment banks obtain most of their funds from their own bonds, foreign currency liabilities, and notes and certificates of deposit to individuals and businesses. These funds are used principally (over 60 percent) for credits to individuals and businesses, more than two-thirds of which are granted for a year or longer.

Over 26 mortgage banks were in operation in 1965. Although their operations are small when compared to those of the commercial banks or *financieras*, the mortgage banks represent an important source of long-term credit through the granting of mortgage loans and by guaranteeing mortgages issued by private individuals.

Capitalization banks handle a very small portion of total private credit operations. Their main function is to provide a means for future small businessmen to accumulate enough capital to get started. Finally, while as yet not completely successful in their operations, savings and loan banks enable the small saver to accumulate sufficient funds to qualify for a loan to purchase a house.

Insurance Companies

There are more than 70 private insurance companies operating in Mexico. Their actions are inspected by the Comisión Nacional de Seguros, whose members are selected by the Minister of Finance. The portfolios of the insurance companies fall under the provisions of the reserve requirements imposed by the Banco de México and the National Insurance Commission. An obligatory part of these portfolios are government securities yielding 3 to 6 percent annually.

As in the banking system, there are both public and private insurance institutions. In national insurance agencies the state participates in the form of majority stockholder, or it has the right to appoint a majority of the members on the board of directors or approve or veto resolutions passed by the stockholders or the board.

Domestic private firms, as well as branches of foreign firms desiring to operate in Mexico, must first have their mode and method of operation approved by the Minister of Finance. In the past, more than 90 percent of the policy coverage by these insurance firms has been on fire and other casualty contracts. The growth of life insurance has been limited by a prevailing fear of inflation and high concentration of income distribution. Thus, as late as 1960, much less than half the existing companies handled life insurance, and only about 25 percent of the policies issued and some 5 percent of insurance value was in life insurance. As the inflationary psychology has subsided and the proportion of the population in the middle-income brackets risen, there has been a very rapid growth in the amount of life insurance purchased by the population, making Mexico today one of the top users of life insurance in Latin America. This changed acceptance of insurance as a long-term form of savings contract has been reflected in the accelerated growth of the financial resources of private insurance companies.

As a part of its overall program of agrarian and agricultural reform, the government in 1954 fostered an agricultural insurance program in the form of a consortium, to provide coverage where private companies found the costs and the risks too high (see ch. 19, Agriculture). The new program's coverage includes frost, drought, floods, hailstorm damage, excessive moisture, hurricanes, fire, and plant pests and disease. This program is handled in part through Mutual Aid Associations organized by agriculturists and cattlemen in each state in Mexico. The federal government subsidizes the new system by covering the excess of losses over premiums and indemnities; because crop damage tends to be high in Mexico, the government subsidy is generally high. Part of the program is obligatory when a loan is obtained from one of the national development banks. The general coverage of this extended agricultural insurance program, however, has been relatively small.

The Securities Market and Exchanges

A stock exchange of some sort, either formal or informal, has existed in Mexico City since about 1890. The present exchange is based on legislation passed in 1932, empowering the Minister of Finance to establish securities exchanges under laws similar to those governing "auxiliary credit institutions" in the nation. The Ministry subsequently created three exchanges (Bolsa de Valores), in Mexico City in 1933, in Monterrey in 1950, and in Guadalajara in 1960. The Ley Orgánica of 1940 specifically charged Nacional Financiera with the task of developing and maintaining the Mexico City exchange. NAFIN has subsequently done considerable trading on the exchange, though most of its trading activity has been limited to its own and government securities.

In 1946, the Comisión Nacional de Valores (National Securities Commission) was founded to regulate the stock exchange in Mexico. The commission is made up of representatives of the government and the private sector. In addition to regulatory responsibilities the Securities Commission has attempted to channel national savings (and particularly institutional funds) toward those areas considered crucial for economic development by political policy makers.

The total transactions on all three exchanges in Mexico comprise no more than 5 to 10 percent of all the securities traded in the country. The main reason for the large "over-the-counter" trading is that almost all public and private banking institutions generally conduct their transactions directly with buyers and sellers of securities. These generally are other banking institutions and related to the market support operations of the Banco de México and NAFIN. Furthermore, of the securities traded directly on the organized exchanges only little more than 6 percent of the transactions involve equity securities, almost all of which are industrial shares. This is due in large part to the desire for closely held control of industrial enterprise, to discriminatory tax deductions favoring interest payments and not dividends, and to the high cost of this means of financing under prospects of inflation. The proportion of transactions involving equities has grown rapidly in recent years, however, doubling between 1960 and 1965.

Moreover, although small as a proportion of transactions on organized exchanges, by rough estimate the ratio of corporate stock to total financial assets is about one-fourth and that to national wealth is about one-tenth, both relatively high, especially for a developing country. If one includes all transactions made outside of the exchange but registered with it, the Mexico City exchange is by far the largest in Latin America.

Over 90 percent of the outstanding volume of fixed-yield securities traded on organized exchanges consists of government bonds, *cédulas hipotecarias*, mortgage bonds, financial bonds, *certificados de participación* of Nacional Financiera, and other such instruments. This is principally because their prices are supported at par through a willingness of the various issuing institutions to buy or sell their securities at any time, to increase the competitiveness of financial instruments relative to other assets and bolster confidence in the financial market. The practice is also necessary to compete in a market characterized by a strong preference for assets which are quickly convertible into cash.

FINANCING SAVINGS AND INVESTMENT

Since 1940 private institutions have been the main means of channeling loanable funds in the domestic market (see ch. 22, Domestic Trade). Public financial institutions were not unimportant but their liabilities were largely in foreign currencies. The most outstanding feature of the majority of financial instruments employed is their high degree of liquidity, or ability to be readily converted into cash. The market preference for liquid financial assets is largely a product of the long period of inflation that lasted until the mid-1950's. Financial assets readily marketable at short notice allowed one to convert holdings into items that would protect the real value of his wealth against erosion from price increases. This strong preference for liquidity was manifested principally in the persistence of short-term claims. Such readily-convertible debt obligations have assumed an ever increasing importance in the money and capital market, and are largely responsible for the growth in total banking system liabilities.

Another significant characteristic of various forms of saving and deposits was the growth of instruments denominated in foreign currencies. This growth reached sizable proportions as a consequence of the devaluations of the peso in 1948–49 and in 1954. It reflected a hedge against further devaluation. As the peso tended to stabilize and become one of a select group of international "hard" currencies, claims convertible to foreign currencies began to decline, progressively so after 1960.

Private Savings and Credit

The interest rate paid on savings deposits has been maintained by the National Banking Commission at an extremely low rate. It has, though, been high enough to attract funds, particularly from small savers in the provinces to whom higher-yielding investments are either unfamiliar or unavailable. As a consequence, savings deposits account for some 6 percent of total banking obligations. In general, however, savings deposits have not been attractive to large and knowledgable savers.

Since 1960, many funds leaving deposits denominated in foreign currencies have gravitated toward specialized types of demand deposits (somewhat akin to checking accounts) and time liabilities (similar to savings deposits) in the form of loans and acceptances of private banks. For example, loans received from enterprises and individuals in return for promissory notes are a principal means used by private *financieras* to attract funds. On the other hand, commercial banks use investment trust as yields competitive with those obtainable from *financieras* promissory notes and acceptances. Finally, the demand for long-term obligations, such as financial bonds and *cédulas hipotecarias* has been rising and such liabilities now constitute about 25 percent of the banking indebtedness outstanding. *Cédulas hipotecarias* are a popular form of mortgage certificate secured both by real estate and guarantees of the issuing mortgage banks.

The ability of households to save depends upon the size and distribution of personal income. Per capita income in Mexico is moderately low, although rising rapidly (see ch. 6, Social Structure). The rate of growth in per capita real gross national product has been about 3 percent a year over the last 25 years. This rise has been accompanied by an increase in the proportion of the population in the upper end of middle income groups.

These elements, income level and income structure, in effect, create two opposing forces with regard to the level of savings in Mexico. The low real per capita income level tends to lower the savings level. In general, it would appear that the net direction of these forces in the country, however, has been toward an increased level of household savings. Savings through financial assets other than corporate stock is now approximately 3½ percent of personal income.

Saving through insurance is still moderately rare in Mexico, and household net purchases of bonds and debentures is as yet relatively small. Although controlled by a relatively small group of upper-income households, savings through corporate stock has been very roughly estimated as accounting for 1½ to 3 percent of disposable income. If that is the case, then total personal saving through financial assets (ignoring the netting out of personal debt) averages about 4½ to 5½ percent of personal disposable income.

The greater part of the loanable funds have been channeled into short-term loans and credits. Almost all medium- and long-term funds come from publicly owned financial institutions, particularly Nacional Financiera, and mortgage transactions. This has not been a serious disadvantage and in fact tends to reflect most commercial and industrial activities, since production techniques are still labor intensive and commercial activity is usually satisfied by short-term financing of inventories and installment credits (see ch. 20, Industry). As in the past, the practice is still to allow regular renewals of loans, so that short-term credit becomes in effect a source of long-term financing.

Commercial and industrial enterprises are not significantly hampered, but the agricultural sector is still short of capital due to high risk and lack of collateral. Less than 20 percent of the credit available to agriculture comes from private banking institutions, most of that being concentrated on the highly commercialized agriculture of the northwest.

With the possible exception of some agricultural investments, money credits outside of the larger urban areas are for very short-terms, often lent by vendors, *compadres*, or friends. Repayments are expected after the weekly, twice-weekly, or daily markets. Generally in rural areas, however, there is a great reluctance either to borrow or to lend, based in most cases on a sense of economic insecurity typical of largely agrarian societies. This stems from a feeling that repayment is dependent upon the elements, which are clearly beyond human control.

Public Financing and Credit

The main source of government financing through credit has been shifted from direct issuance of newly printed money by the Banco de México to other lenders in the system, principally private financial institutions. The private financial organizations have, in effect, been forced, under threat of penalty, to provide a large volume of relatively low cost financing to the government sector through a carefully planned use of the selective credit-control mechanism in the central bank's reserve requirement policies. As a consequence, while there has been a significant drop in the inflationary pressures induced by governmental financing through the printing of paper money, there has also been a significant diversion of financial resources to the financing of governmental expenditures. This makes loanable funds both scarce and costly in the private sector of the economy. This scarcity is only partially relieved by the expansion of foreign credits to the public sector. Yet, the recorded domestic indebtedness of enterprises, both public and private, and individuals has tended to increase far more rapidly than has that of the government sector.

There are three principal sources from which financing of public enterprises can be obtained: the government sector, other domestic sources, and the foreign sector. Although the figure tends to vary widely from year to year, it would appear that on average only about 20 percent of total public enterprise investment expenditures comes from the domestic money and capital market. Reliance upon foreign borrowing has dramatically increased to the point that the amortization payments have become a serious problem, amounting to more than 20 percent of the peso value of Mexican exports of goods and services (see ch. 23, Foreign Economic Relations). As a consequence, a greater reliance has begun to be placed on internal financing of public enterprise activities, a financing method made possible through a considerable improvement in their fund structure.

CURRENCY

Use of Money

Most people today in Mexico use money to affect exchanges of goods and services. The exceptions are the more remote Indian elements living along the Mexican-Guatemalan border in Chiapas, Campeche, and Quintana Roo. In these small rural, and strongly Indian population centers, there is much bartering of locally produced goods. Sometimes commodity money is used although it would appear that, because of the almost nationwide acceptability of fiduciary money, the use of commodities as money is rare. Even in towns of as many as 5,000 inhabitants near such large cities as Guadalajara and Mexico City, however, there still is extensive trade carried on by means of barter. The exchange rates, even if they are in terms of money prices, are frequently set by custom and imbedded in a network of extra-economic social relations and obligations. A form of credit will sometimes occur in barter transactions embracing the exchange of the same type of goods to be handed over on different days. This type of "barter" credit is particularly prevalent with highly perishable goods, such as meat, where slaughter or harvest may occur at widely differing times.

Monetary Policy

Unlike the situation in the most advanced industrialized countries where a balance is struck between monetary and fiscal policy to achieve internal growth and external balance, Mexico has had to place greater reliance on monetary control techniques than on the fiscal system. This is due to the markedly low responsiveness of tax revenues to changes in gross national product. This imbalance is probably being corrected by more effective tax policies (see ch. 24, Public Finance).

Monetary measures of a conventional sort, namely, open-market operations and variations in the discount rate, have generally proved less effective in Mexico than in more highly industrialized countries.

This is largely due to the less well integrated overall credit market and to a desire not to rely on interest-rate adjustments which might well work to inhibit investment expenditures and, therefore, economic growth. Overall monetary policy is usually determined in broad detail by the Minister of Finance with close consultation of the Banco de México and Nacional Financiera. Over the years, this policy has generally changed in response to development of the monetary and capital market and to underlying changes in the structure of production and the distribution of income.

The basic policy instrument governing the size of the money supply and the availability of credit is the reserve requirement. Private banks are legally required to maintain reserves with the Banco de México in cash and securities in amounts equal to specified percentages of their deposits and other selected liabilities. This provides the central bank with a means of preventing or encouraging money creation and credit expansion. The legal reserve requirements are based both on total deposit obligations at any moment in time and on increments (or "marginal increases") over deposit levels on previously specified dates. This form or "marginal" reserve requirement has proven to be a most useful technique, even though it involves problems of correct and prompt diagnosis of changes in market conditions. It allows tight control to be exercised over credit expansion but also because it allows smooth adjustment in a bank's reserve position without forcing a drastic and perhaps potentially destabilizing revision of a bank's portfolio. It penalizes those banks that persist in increasing credits most rapidly during periods of restrictive policy while favoring those same banks when policy makers are attempting to promote credit expansion; thereby it exercises a generally stabilizing influence.

The original cash-reserve requirements had been supplemented in 1948 and 1949 by requirements governing the division of bank assets between various types of securities and other assets. Thus, the Banco de México by means of these selective credit controls is able to influence directly the allocation of credit resources between competing claimants in the economy. These requirements force private credit institutions to acquire securities or grant credits which might otherwise not appear attractive. Also, they tend to neutralize expansionary excess reserves while affording a means of shifting public securities from the central bank portfolio to portfolios of the private credit institutions. This prevents potential inflationary pressures from mounting as would occur through the financing of public debt by the printing of paper money. Moreover, the Banco de México is able to direct the private credit institutions to use a specified percentage of the funds for national economic development. In addition, these qualitive or selective credit controls allow the Banco de México freedom to determine the types and amounts of securities to add to its own portfolio as well as the types and amounts of rediscounts to make available to various banking system institutions.

Through its rediscounting powers the central bank is able to influence the types of borrowers and the types of collateral to be made eligible by the banking system. Moreover, the power to dictate to some degree the structure of bank claims has been used to reduce the degree of liquidity of banking system obligations and to control the volume of funds made available to various lending institutions. This is accomplished by inducing the banks to extend the maturities of their obligations and by forcing them to use a larger portion of their resources to acquire longer-term securities, expecially those issued by the government and other public-sector borrowers.

Money Supply, Output, Prices, and Interest Rates

Changes in the money supply due to changes in monetary policy have had a close relationship to output, prices, and interest rates in Mexico since 1940 (see table 48). The money supply, in the form of coins, currency, and checking accounts has grown at a compound rate of about 14 percent per year since 1940. Moreover, the absence of any sustained period of "tight" money has been influential in contributing to the prolonged period of material progress experienced by Mexico.

Until recently, the Mexican economy, unable to restrict international currency movements because of her pledge to the IMF to maintain free convertibility of the peso, was especially vulnerable to external influences. This was due to the raw-material and agricultural nature of her international trade and her past record of inflation and devaluation. Official holdings of foreign exchange reserves have tended to fluctuate widely. These variations in official reserves of the Banco de México, created by attempts to maintain the international value of the peso, have directly affected the rate of increase in the money supply and with it the rate of growth of output, the price level, and interest rates. Particularly during two periods, 1946–49 and 1951–54, large decreases in the rate of expansion of the money supply, were coupled with sizeable decreases in the official reserves. In neither case was the resulting deflation sufficient to reverse the adverse balance of payments conditions, and both required sizeable devaluations (in 1948–1949 and in 1954) to reverse the falling trend in official reserves (see ch. 23, Foreign Economic Relations).

These events made clear to the Mexican monetary authorities the inadequacy of its policy tools. In an attempt to heighten the responsiveness of the economy to monetary policy shifts and to smooth the cyclical transitions, the selective credit controls were instituted in 1948 and 1949 but they were not fully implemented until after the 1953 recession and 1954 devaluation and were not extended to the *financieras* until 1960.

Table 48. Indices of the Mexican Monetary Experience, 1940–1967

Year	Money [1] supply (in millions of pesos)	Wholesale [2] prices (1950=100)	Interest [3] rates	Exchange rate (pesos to U.S. dollars)
1940	1,060.4	33.0	----------	5.40
1941	1,269.5	35.2	----------	4.86
1942	1,749.9	38.8	----------	4.85
1943	2,672.9	46.8	----------	4.85
1944	3,309.9	57.4	----------	4.85
1945	3,539.5	63.9	----------	4.85
1946	3,460.8	73.5	----------	4.85
1947	3,438.7	77.8	----------	4.85
1948	3,916.9	83.4	9.7	5.76
1949	4,352.9	91.4	10.6	8.02
1950	5,988.5	100.0	10.7	8.65
1951	6,800.9	124.0	11.4	8.65
1952	7,078.7	128.6	11.3	8.65
1953	7,652.9	126.1	10.6	8.65
1954	8,723.5	137.9	11.5	11.34
1955	10,516.7	156.7	11.4	12.50
1956	11,692.2	164.0	12.0	12.50
1957	12,493.4	171.0	12.6	12.50
1958	13,388.9	178.6	13.0	12.50
1959	15 434.3	180.7	13.4	12.50
1960	16,888.9	189.7	14.0	12.50
1961	18,007.6	191.6	14.5	12.50
1962	20,274.3	195.1	14.4	12.50
1963	23,680.2	196.3	13.7	12.50
1964	27,640.2	204.7	12.4	12.50
1965	29,518.9	208.7	13.2	12.50
1966	32,751.4	211.4	11.8	12.50
1967	35,565.3	217.4	10.4	12.50

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[1] Coin, currency, and check-deposit liabilities of the Banco de Mexico and commercial (deposit and savings) banks. 12.5 pesos = US$1.

[2] Index of prices of 210 articles in Mexico City.

[3] A composite figure using an estimate of the average yield on assets of private banking institutions, excluding legally required investments.

Source: Adapted from *Informe Anual*, Banco de México; with format adaptation of Brothers, Dwight, and Solis M. Leopoldo, Mexican Financial Development, pp. 74, 84, 192 (face).

Despite increasing domestic production, a high growth rate in the money supply before 1955 generated inflationary pressures and monetary instability. This situation generated again a recurring characteristic of the monetary propensities of Mexicans, namely a strong desire to spend paper money quickly upon receipt, a desire strengthened by a fear of rapid depreciation in the purchasing power of the peso. This attitude against hoarding paper currency was corroborated by growing complaints of land speculation and "excessive" purchases of "luxuries," investments characteristic of inflation-avoidance in a limited securities market.

In the early 1950's a fundamental change in the manner of monetary expansion began to take place. These shifts began to take effect around 1956. They are characteristic of the Mexican monetary system to this day. Monetary system credits to the government, while still large, are relatively less important than before. The Banco de México no longer directly monetized the government's budgetary deficits. Rather it indirectly supported them by a system of selective credit controls which permitted a diversion of private investment funds into the public sector. Moreover, public enterprises and the government itself came to rely more heavily on foreign credits. The result was a lower and generally steadier rate of money expansion, a little more than 10 percent per year since 1955. As a consequence, prices have tended to rise at only about 3 percent per year while the annual growth in the supply of goods and services absorbed most of the rest of the increase in the money supply (see ch. 18, Character and Structure of the Economy).

The overall effect of these recent changes was a growing confidence in the money economy. This is shown by a decline in the velocity of circulation of money, indicating an increased confidence in the peso's ability to maintain its purchasing power and shown by the increasing importance of checking accounts in the total money supply. Checking accounts now constitute 60 percent of the money supply as opposed to less than 38 percent in 1940.

When compared with rates determined in the financial markets of the United States and Western Europe, the interest rates encountered in the Mexican market are high, at least in the case of those determined by the free operation of supply and demand in the loanable funds market. The lowest rates are paid on government securities and savings deposits (the latter now varying between 4½ and 5½ percent).

The actual rates to be found in the loanable funds market range from 10 to 12 percent for excellent credit risks, 14 to 18 percent for many companies, and 20 percent or more for "speculative" loans. These rates are effectively pushed even higher, to a range between 20 and 25 percent by additional costs of borrowing stemming from commissions, charges for opening credit accounts (usually equal to a minimum of one percent of the amount involved), discounts of interest in advance, and a common requirement of maintenance of reciprocal balances with the lending institution (usually equal to 20 percent of the amount of the indebtedness). Rates on short-term loans in rural communities are considerably higher and often termed "usurious" or "exorbitant" by many people in Mexico.

These high interest rates reflect in part the effects of the substantial inflation prevailing from the mid-1930's to the mid-1950's. Attempts to stabilize prices by the government after the 1954 devaluation, however, proved to be a further stimulus to increasing those rates of interest determined by market forces. The expectations of further inflation produced a general unwillingness to hold money balances beyond those necessary for transactions purposes. The monetary authorities remained persistent in not allowing the money supply to expand beyond a level they felt was consistent with maintaining internal price stability and external balance. At the same time, they attempted through use of selective credit controls to facilitate the growth of output without directly monetizing governmental deficits. In the private sector this procedure increased the scarcity of loanable funds which were in high demand. The result was a higher level of interest rates, as indicated by the rise from 11.4 percent in 1955 to 14.0 percent in 1960.

The purpose of this policy was to dispel the existing inflationary psychology and to reinstate a more efficient allocation of resources. Then expansionary forces could lead higher levels of output without a higher internal price level or external imbalance of payments. The approach generally proved successful because while the effective or real rate of interest was higher, the Mexican economy began to sustain a higher level of output. This growth in itself tended to ease the pressure on the interest rates. When coupled with a new policy started in the early 1960's of general monetary ease and with more efficient fiscal actions and greater foreign borrowing, the effect brought on a steady decline in the market rate on private securities, from over 14 percent in 1960 to around 12 percent by 1965.

SECTION IV. NATIONAL SECURITY

CHAPTER 26

PUBLIC ORDER AND SAFETY

Available data indicate that in some categories of crime, there appears to have been a decrease in the rate of criminal activity in Mexico over the past 25 years. Nevertheless, crime continues to be a serious national and local problem. This is particularly true with respect to homicide, for the murder rate has grown over the years and is high not only by Latin American experience but when compared to homicide rates in many other countries. The Federal Budget for 1968 cites an estimated need for over 173 million pesos (12.5 pesos equal US$1) for the administration of justice at the federal level alone.

Federal legal power tends to be substantially greater than that possessed by the states. The constitution requires the states to enforce federal laws, and the states are required to follow the federal penal code as a model. Moreover, the states' chief executives, the governors, can be removed by the President. The state police however, are controlled by the governors (see ch. 13, The Governmental System).

The largest part of the workload of the courts consists of *amparo* actions, a large proportion of these actions being for criminal matters. The right of *amparo* is described in the constitution, in the Law of Amparo, and in procedural codes; it protects individuals and ensures procedural fairness whenever administrative or legislative actions or laws threaten constitutionally guaranteed rights. The Law of Amparo applies in many disputes between federal and state authorities where constitutionality is at issue.

In the larger cities, prisons are severely overcrowded, reflecting the rapid influx of people from rural to urban areas. Reforms are in process, however, with new, more appropriately designed prisons being constructed; changes in penal law being undertaken; adequate training being given to police and prison personnel; and greater use of modern equipment and methods being made.

Recent years have seen the outbreak of violence of a more massive, and perhaps more organized form. Strikes escalating to gun battles (as in the Copra Workers Union strike in Acapulco in 1967) and student riots in various places (including the 1968 rioting in Mexico City—see ch. 14, Political Dynamics) illustrate a continuing need for having federal troops to serve as a back-up force to the police. As yet, these events appear to have only a local pattern, not a national one, each with different participants, generally, and occasioned by varying causes. Demonstrations marked by violence lead to the invocation of the 1941 Law of Social Dissolution, where, in effect, a state of siege is declared and constitutional guaranties of individual rights are temporarily suspended. One of the provisions of the Law of Social Dissolution occasioned other recent demonstrations. In August and September 1968, students, teachers, and parents marched on the President's office to demand changes in the Penal Code, which would abolish the part of the 1941 law seeking to punish subversive activity, and elimination of articles 145 and 145-bis concerning social dissolution.

THE LEGAL SYSTEM

Historical Development

From conquest in 1520 to independence in 1821, Mexican legal institutions and penal law were largely adapted from Spanish ones. A chief judge appointed by the Spanish Crown was given complete civil and criminal jurisdiction. A superior court was set up in 1527. Local magistrates courts and municipal councils—the latter of which survive today—were also established (see ch. 3, Historical Setting).

A guiding principle of Spanish law—much of it derived from canon law and to be carried into Mexican law—was that better a guilty person escape than an innocent one be punished. Punishment generally tended to be severe and included not only corporal punishment, but imprisonment, exile, confiscation of goods, and fines. Imprisonment for debt was common. The presidios, which had formerly served as castles and frontier forts garrisoned by military forces, became the major penitentiaries.

With independence, Mexico carried on with Spanish penal law more or less intact. Added stress was given to developing laws to deal with carrying arms; the use of alcohol; restrictions on beggars, highway bandits, and thieves; police organization; and the establishment of prisons. Penal codes changed only slowly after independence. An inquisitional system, under which the judge had absolute power and served as prosecutor as well, continued to prevail. There existed a general lack of guaranties for the accused and indefinite prison sentences were often given. Following French and American models of penal law, changes began to be introduced.

The Constitution of 1824 foreshadowed some of the legal and juridical doctrine underlying today's system, but implementation of the constitutional provisions lagged. The Constitution of 1857 introduced changes which did take effect. All special tribunals were abolished, except military ones and one for the press to deal with such matters as plagiarism. The federal court system prescribed was substantially like that found today, and many of the constitutional bases for criminal codes and procedures were the same as those in the Constitution of 1917, including provisions for the classic rights of the defendant.

Throughout the latter part of the 19th century, criminal justice was usually effected either by a single judge or through a court of citizens, a popular jury. Punishment became less severe as extreme and unusual penalties were prohibited and pressure increased to abolish the death penalty altogether. Imprisonment came to be based on the recognition of degrees of liberty and of association with outsiders. Labor became less punitive in character and education more secular than religious in efforts at social rehabilitation of the criminal.

Two distinctive features of the Mexican legal system, dating back to the 19th century, are the Public Ministry (Ministerio Público) and the right of *amparo*. The Public Ministry provides public prosecutors and investigators and evolved from the *fiscales*, the collectors of taxes and fines, who in time became charged with crime repression. The right of *amparo*, the prime legal mechanism for protecting individual rights and for resolving conflicts between the states and the federal government, was instituted about 100 years ago and continues with refinements to the present time (see ch. 13, The Governmental System).

Amparo was introduced in the 1847 Acta de Reformas, was made more explicit in the 1857 Constitution, and additionally detailed in the 1917 Constitution and in the Laws of Amparo published since then *Amparo* provides protection against the application of a law but does not constitute action against the law itself. Its function is similar to that of injunctions and writs of habeas corpus, though it is more comprehensive. It does not attack the constitutionality of laws. There is no *amparo* against laws, a feature defended by Mexican writers for keeping the courts out of politics and foreclosing their possible exercise of legislative power. A simplified *amparo* law was promulgated in 1869 and 123 *amparo* cases were decided in that year. Further modifications were introduced and by 1880 there were 2,108 cases. *Amparo* cases continue to be a large portion of the courts' workload today.

A pernicious element of the law, which achieved prominence in the 19th century and was particularly marked in the operation of the hated *rurales* under the dictatorship of Porfirio Díaz, was the *ley fuga*, which permitted the summary execution after arrest of prisoners "attempting escape." Its last widespread use was under the counterrevolutionary dictator, Victoriano Huerta, but it persisted beyond this, especially in rural areas. The *ley fuga* is no longer in force.

Individual rights, constitutionally provided, cannot ordinarily be violated or suspended in time of peace, although the law recognizes a condition where they can be temporarily suspended because of a danger of invasion, serious disturbance of the public peace, or any other event which may place society in great danger or conflict. This exception is contained in Article 29 of the Constitution. In the legal systems of a number of other countries the condition is referred to as a state of siege, whereby, in effect, martial law prevails. In Mexico this provision is detailed in The Law of Social Dissolution enacted in 1941, wherein the Executive can suspend individual rights. It is the section of this law covering subversive behavior against which demonstrations were held in 1968. The law is ordinarily used in case of riots and strikes.

Criminal Codes

The penal code of 1871 was the first complete penal code since the Spanish code of 1822. It provided for individual rights, including those of the accused and the convicted, which were contained in the Constitution of 1857. This code also introduced the concept of conditional liberty (parole) on good conduct or prison term extension on bad conduct, as well as the notion of attempted crime. The 1871 penal code was enacted for the Federal District and the territories, though it served as a partial model for the states. It survived with modifications until 1929 when a new code was drafted to serve for only 2 years, after which a new code was established.

The 1931 penal code for the Federal District and the territories went far to modernize the law, eliminating such feudal remnants as special privileges, formulas, and rites. Juvenile delinquency was singled out for special attention, new provisions were made for controlling the traffic in narcotics, for dealing with corruption, pandering, and espionage. The code comprehends both crimes enforceable in the District and territorial local courts and a number of federal crimes, enforceable only in federal courts.

Crimes are broadly categorized: those against other people, those against property, those against the state, those against public morals, and those against public health. The imposition of penalties belongs to the judiciary. Administrative authorities can punish violators of governmental and police regulations only if the penalty does not exceed 36 hours imprisonment or a fine, and, if the fine cannot be paid, imprisonment as a substitute cannot exceed 15 days. If the offender is a day laborer, the fine cannot exceed a week's wages.

The states are required by law to publish and enforce federal laws. Although Congress requires them to use the 1931 penal code in establishing their own codes, literal transfer has not been effected or required and differences persist. For example, while capital punishment is prohibited in the 1931 penal code, and this provision remains in the modified versions, not all state jurisdictions have abolished this penalty. The constitution itself, only permits its use for certain crimes, such as parricide, abduction and highway robbery, but the constitution does not require that the penalty be imposed for such crimes.

Habitual drunkenness or vagrancy may result in the loss of the offender's civil rights. Kidnapping, depending on the form, calls for no less than 5 years and no more than 30 years in prison, plus a fine. Various forms of assault are distinguished, homicide is treated differently depending upon whether it is committed for a profit, and smuggling is given special attention. As one of the more advanced of the underdeveloped nations, Mexico has experienced a growing need to deal with more sophisticated crimes such as fraud, embezzlement, abuse of trust or confidence, and the like, and the codes and decree laws have reflected these changes. There are rather severe penalties imposed upon those who violate the personal rights and constitutional guaranties of others. Such penalties vary with the severity of the offense and range from a fine to lengthy imprisonment.

Under the Law of Social Dissolution, constitutional guaranties may be suspended for the duration of a state of siege. Private persons can arrest and detain others if they are witness to a crime, but must turn them over to the authorities immediately.

Mexico grants political and diplomatic asylum. Aliens cannot be deported without juridical determination, although the President can issue a deportation order if deemed necessary for public safety. Mexican nationals may not be extradited by foreign countries, unless a treaty so specifies or unless they are naturalized citizens of less than 2 years standing. Extradition among the Mexican states is required, however, if the penalty involved is at least one month in prison.

LAW ENFORCEMENT

Social Controls

The country has a strong family orientation, focused on the father (see ch. 7, Family). The President is regarded as a father over all the nation, and receives respect and obedience accordingly. This linkage works more clearly in the rural areas, where the combination of respect for authority and influence of the Church operate to limit criminal activity and to condition the kind of criminal behavior that does occur. In general, the rural areas tend to have more simple crimes: drunkenness on occasion, some fighting—perhaps in conjunction with drinking or celebration—and some unpremeditated murder and simple robbery.

Such controls weaken substantially in the urban environments, for urbanization has proceeded at a very rapid pace, resulting in overcrowding, unemployment, slum conditions, and conflicts of values between the rural migrants and the city dwellers (see ch. 6, Social Structure). Being imprisoned is not always viewed with distaste or contempt since many of Mexico's heroes and revered leaders have been confined at one time or another.

With the accelerating growth of the middle class and with continuing reductions in illiteracy, public appreciation of the value of law enforcement has been growing. The widespread lawlessness and violence which characterized much of the country's earlier history has given way to the relatively much greater stability visible in recent decades (see ch. 3, Historical Setting).

The Public Ministry

The institution of Public Ministry exists at both federal and lower levels. At the federal level, the public prosecutor and his assistants are part of the office of the Attorney General of the Nation. He is a party in civil, administrative, and criminal cases. The public prosecutor acts as the accusing party in federal criminal cases. Initially, he acts as the chief of the investigating force, but he drops this role for that of prosecutor when the case goes to court. His duties are established in procedural codes. He is the watchman over prompt and just administration of justice; he must represent the public as plaintiff at the same time that he must act to preserve the accused person's rights. If these rights are violated he must see that reparations are made. It has been said that the office was largely decorative until the Revolution of 1910–1917, since before that time prosecution was actually carried out by municipal leaders, political leaders, and, at times, leaders from the military.

At lower as well as federal levels, the public prosecutor is independent of the courts and cannot be censured by them; at the same time he has no judicial power. In the codes developed over the years to regulate the office, the duties have tended to follow the French concept of the duties of such officials. Public defenders are also provided for by law.

The federal public prosecutor is appointed by the President, and he must have had at least 5 years of experience as a professional lawyer. As Attorney General he is also the legal counselor for the Government. While part of his function is the repression of crime, he does not ordinarily enter a case until a crime has been committed. At the state level, the public prosecutor is appointed by the governor; in the municipality he is chosen by direct popular vote.

The Police

The national police are part of the Ministry of the Interior (Gobernación) and have their headquarters in Mexico City. They are charged with investigating actual or threatened infractions of federal law. The Federal District courts act as courts of first instance for federal law enforcement, and their workload tends to be quite large, a condition which reflects the size of the task performed by the national police.

Also at the national level are police forces for the Ministry of Public ealth, national railways, hydraulic resources, and Petróleos Mexi- anos, the nationalized petroleum industry.

Each of the 32 federal entities—the 29 states, the two national ter- tories and the Federal District—has its own police force, each with chief reporting to the Governor of the state or territory. The uni- orms vary somewhat from state to state, but in general they resemble nose of the United States. They normally carry pistols and, a times, hite truncheons. In addition to enforcing the law in their respective ates, the state police also assist in enforcing federal laws.

Large cities, like Mexico City, have a variety of kinds of police. lexico City has judicial police, park police, highway police, secret olice, riot police, and police units with such specialties as foreign nguages. There are private police forces as well. Many banks and epartment stores and similar institutions have their own police and neir own jails. Legislative action, however, may eventually change nis practice, so that there will be a single police force for each state nd the Federal District rather than the many different types of police orces which have been in existence; a move has been underway in ne Senate to accomplish this goal.

At the village level, police work is much less intricate. Village police ormally work in pairs, but they ordinarily do not have police cars, wo-way radios, or paddy wagons. If vehicles are needed, a taxi may e used. The pace of police work in the villages is generally slow dur- ng the week, but rises on the weekend when rural dwellers come to own for church and marketing, when drinking and celebration may ead to fighting. The Constitution requires that the federal Executive nd the state governors shall command the public forces in the munici- alities where they customarily or temporarily reside.

Securing a sufficient number of properly trained police personnel as been a long-standing problem. Police academies have been estab- shed, and police schools in other countries have been used. Mexico ity has established a new Police Academy of rigorous standards, hich graduates 100 to 150 well-trained policemen each year for the ity's police force.

Police work has become much more technical. Advances in toxicol- gy, chemistry, forensic psychiatric, polygraphy, and other technol- gies have been exploited in both crime laboratories and routine police perations. Modern equipment has been made available. In 1961 an greement was signed between the United States and Mexico for the ransfer of such United States equipment for the use of Mexican ational police.

Other Organizations

Two other organizations having major roles in law enforcement tand out as particularly significant: the major political party itself, the Institutional Revolutionary Party (PRI), and the armed forces (see ch. 27, The Armed Forces). The PRI is singled out as representing continuity in the executive and legislative branches of the government (see ch. 13, The Governmental System). The party's role in this context is primarily one of crime prevention through its action to limit and contain dissidence and potentially illegal activity. This it does by incorporating a very wide spectrum of special interests within its membership and by undertaking socio-economic reforms to get at the causes of crime, subversion, or violence, rather than relying on the use of armed force, military or civil, to deal directly with aberrant behavior. The necessity for armed force has not been removed, of course, but the need for massive and frequent use of it has been reduced (see ch. 3, Historical Setting).

While the armed forces are not prepared to engage in large scale and extended international conflict, they have shown themselves to be competent in backing up the civil police forces in maintaining public order and internal security. Their presence serves as a deterrent, and, distributed over the country in several military zones, they have served to assist local police in handling riots. Recent instances of such assistance occurred in the 1968 student riots in Mexico City and in the 1967 strike by the Copra workers union in Acapulco, which had evolved into a gun battle. The Navy works directly in preventing crimes such as smuggling, and assists in preventing others such as the traffic in narcotics. The work by the armed forces on civic action projects helps indirectly to maintain public order by eliminating some of the causes of disorder.

THE COURT SYSTEM

The Federal Judiciary

At the federal level the judicial branch consists of the Supreme Court of Justice—the highest court in the land—six circuit courts, and about 46 district courts, or at least one for every state and territory and the Federal District. The circuit and district courts have jurisdiction similar to that of such courts in the United States (see ch. 13, The Governmental System).

The Supreme Court is made up of 21 justices and five supernumerary justices. They may sit in plenary session, though ordinarily the work flow takes place through four chambers, each with five justices, which deal respectively with criminal, civil, administrative, and labor matters. The justices are appointed by the President with the consent of the Senate and must have been lawyers for at least 5 years and have records free of conviction of any serious crime.

The Supreme Court has both original and appellate jurisdiction, but it does not rule on the constitutionality of legislation. Through the tion of *amparo* it can provide relief from administrative or judicial tions which threaten the constitutional rights of petitioners, but nstitutionality itself is not addressed. As such, the judiciary is more ministrative than independent. Precedent is not as widely estabhed as in Anglo-American institutions, but five like decisions in a w on a given matter establish precedent that lower courts must serve.

Each circuit court has six judges who are appointed by the Supreme ourt. In *amparo* actions they sit as a full court; in other cases they as individual judges. Their term of office is 6 years, and they, too, ust have been lawyers for at least 5 years. Each circuit court is asgned to a justice of the Supreme Court, who must make periodic sits of inspection. In *amparo* cases, the circuit court is the final court appeal unless the law involved is being impugned as unconstitunal, unless violation of Article 22 (which prohibits extreme or unual punishment) is alleged, or if the conflict is between the federal d state governments.

The district courts act as courts of first instance in matters relating federal law. Their members are appointed by the Supreme Court; ey must have been lawyers for at least 5 years; and each is assigned a justice of the Supreme Court for inspection purposes. Supermerary judges may be appointed by the Supreme Court if the case ad so warrants. District court judgments in direct *amparo* cases are bject to review.

The members of the superior courts for the Federal District and e territories are appointed by the President with the consent of the amber of Deputies. Their qualifications are similar to those of the embers of the higher courts. They appoint the judges for the courts first instance and the minor and correctional judgeships in their eas. There are also federal grand juries of seven members, which ncern themselves with crimes committed in the press, crimes against blic order, and crimes and faults of Federation officials.

State and Local Courts

The Constitution allows the states to organize their own judiciaries, d they generally follow the pattern set by the Federal District. Their perior court justices are usually appointed by the governors with e consent of the legislatures. They usually have both original and apllate jurisdiction. The free municipality is preserved as a conitutional requirement, and each municipality is given juridical rsonality. The local judicial provisions in the Federal District and e territories are set up by the federal courts in those areas. In the unicipalities, the municipal council is preserved, and provisions are ade for both judges of first instance and justices of the peace. Govnors can grant pardons to those convicted of crimes against their respective states or of infractions against local laws, and the President can pardon criminals convicted of federal offenses and those convicted in Federal District and territorial courts. The Congress can give amnesty in cases of violation of federal law.

In civil or criminal cases involving only the interests of private parties, the plaintiff can, if he chooses, use the local state courts rather than the federal courts in matters involving the application of federal laws or treaties. Appeals may be made to the Supreme Court against judgments in second instance at the state level, in cases in which the Federation is interested.

Special Tribunals

The constitution provides that the only special tribunals will be those of the armed forces. A number of exceptions apply, however. In the field of labor law, bodies with quasi-judicial powers have been set up: Municipal Boards of Conciliation; Central Boards of Conciliation and Arbitration; Federal Boards of Conciliation; and a Federal Board of Conciliation and Arbitration. Federal law gives these boards jurisdiction over many kinds of conflicts, legal or economic, individual or collective.

There are special fiscal tribunals at the federal level, also of a quasi-judicial nature. The Federal Election Law of 1946 provides for a Federal Electoral Commission and Local electoral commissions. Punishment is not within their province, however. For full trial and punishment, offenders are sent to the federal courts if federal laws have been vioated, and to state courts if state laws have been violated. Finally, legislation provides for the separate trial of juveniles in juvenile courts established in the Federal District and the territories and states.

CRIMINAL PROCEDURES

There was no complete code of criminal procedure until one was promulgated for the Federal District and the territories in 1880. Prior to that time it had not been rare for trials to last many years; frequently they lasted no less than 2 years. A new procedural code was enacted in 1894 with innovations concerning the prosecutor's office and the judicial police. The first codification of criminal procedure for the Supreme Court and the lower federal courts occurred in 1908. A new procedural code, one still substantially in effect, was enacted in 1931 to regulate the criminal procedures of the Federal District and the territories. Its provisions have been largely incorporated into the state procedural codes as well.

Arrest and detention must be preceded by the issuance of a warrant by a competent judicial authority, except in cases of *in flagrante delicto*, when anyone can make the arrest, and in cases where the need vital and no judicial authority is available. For the arrest, the ac- ised must be shown to be presumed guilty on reasonable grounds, id the crime with which he is charged must be one for which im- risonment would be the penalty. He is entitled to legal counsel from ie time of arrest. Detention awaiting trial must be as short as pos- ble, and in no case can the detention period exceed the maximum rison term applicable to the crime. The accused must be set free on emand if he can pay bail, which is set according to his status and ie gravity of the offense. Bail may not be permitted if the offense irries a prison term of more than 5 years.

Detention cannot exceed 3 days without a formal order of commit- ient with specification of charge and accuser. The subsequent trial in deal only with the charge or charges specified. The law requires iat the place of detention be separate from the place for serving sen- nces, although in practice this requirement is often not met. For the ial the offender must be represented by legal counsel, his own if pos- ble; if not, he can choose one from a list presented by the court, and, he fails to choose one of these, the court will appoint a defender.

Trials are usually open, unless their subject matter would be in- irious to public morals, order, or security. During the trial the de- endant has the right to confront the witnesses against him, and he an cross-examine them as well as introduce witnesses and evidence n his own behalf. Jury trials are not usual unless the penalty in- olved exceeds 1 year in prison or if the crime is against the domestic r foreign safety of the nation. If a jury trial is held, the jurors must erve—jury duty is obligatory for Mexican citizens—and they must e able to read and write and be residents of the place where the ffense was committed. The defendant must be tried within 4 months the penalty involved does not exced 2 years in prison, or ithin 1 year if the maximum penalty is greater. Penalties are im- osed by judicial authorities.

The accused has legal recourse before, during, and after the trial hrough the provision of *amparo*, which covers any allegations of iolation of his constitutional rights. Through this channel, which xtends up to the Supreme Court, he can secure relief from false ar- est, improper procedure, false witness, extreme and unusual punish- ient, or any other violation of his rights, including those relating to rocedural fairness.

The organic law and procedures provide that in the case of actions hich could deprive the accused of his life, could threaten his per- onal liberty by means other than through judicial proceedings, or ut him in danger of deportation or exile, the accused can apply for *mparo* through the request of other persons if he is unable to do so imself. Moreover, if the penalty includes deprivation of life, deporta- ion, or exile, the penalty will be suspended. The penalty would also be suspended if it is alleged to come under the constitutional prohibition of extreme or unusual punishment. The strictures regarding rights and the use of *amparo* are applicable whether the court is federal, state, or local.

THE PENAL SYSTEM

The constitution requires that the federal and state governments organize their penal systems on the basis of labor, training, and education as a means of effecting the social readjustment of the offender. The institutions being developed and used have been moving toward that goal. If a penal facility in any of the states is inadequate or nonexistent, the state can make an agreement with the federal government for a prisoner convicted of a common offense to serve sentence in a federal establishment. The responsibility for overseeing and regulating the serving of sentences resides with the penal administration rather than with the courts or an administrative judge.

At the village level, jails are often rather flimsy in construction without close security over the prisoners. Escape attempts are not common in the village and small town jails. While food may at times be sparse, families are free to augment the prisoner's diet, and in some cases the prisoner's family may move in with him and set up housekeeping. Jailing is more common at the village level since many prisoners do not have the money to pay fines. They work off the fines through cleaning streets, gardening for the municipal landscape, and the like. Prisoners are often encouraged to produce handicrafts and are allowed to sell their products. While beatings and other violations have been reported, guards rarely mistreat cooperative prisoners. Most jails allow a weekly conjugal visit in private. Ordinarily this privilege is reserved for visits by the spouses of married prisoners.

The jails in the larger cities, especially the district jails, tend to be overcrowded with consequently poor conditions. The overcrowding stems in part from the relatively high rate of murder. Further, it has been most difficult to maintain a rate of growth in penal facilities adequate to the heavy population influx to the cities. It is required that women serve their sentences in places separate from those for men, and separate facilities have been built.

The penitentiaries of newer design have come much closer to meeting requirements. In 1958 a penitentiary designed for 1,000 prisoners was built in the Federal District. This penitentiary covers an area of 1.5 million square meters, of which 100,000 square meters represent prison buildings. It has three blocks of three-person cells and one block of 152 single cells. Prisoners can receive female visitors in private; there are relatively elaborate medical facilities, a primary school, a library, an auditorium; there is training offered in such trades as ilor, printer, carpenter, and electrician; and there are athletic facili-es for football, basketball, and baseball.

The practice of transporting criminals to a penal colony has been existence since 1860, when vagrants and pickpockets were sent to ucatán to work on farms. In 1894, convicted robbers were sent to ork tobacco fields. Such colonies have been defended on grounds that ey more nearly represent colonies of regeneration than peniten-aries of punishment. In 1905, a federal penal colony was established n the Tres Marías Islands, about 60 miles offshore in the Pacific cean. Prisoners are allowed to have their families live with them. hatched huts are provided, and the convicts work to develop the slands' natural resources. The use of penal colonies is ordinarily lim-ed to prisoners with sentences of 3 years or more. This restricts he use of such colonies to a relatively small proportion of those sen-enced, since sentences of more than 3 years are given in only about 20 ercent of the cases.

INCIDENCE OF CRIME

The somewhat fragmentary statistics available suggest that there ay have been an overall decrease in crime over the past 25 years. omplete data are not at hand covering all infractions of the law. ata on minor infractions were not found, nor were data on crimes gainst the state. There also must be presumed to exist numbers of nreported crimes as well as crimes that are dealt with without going hrough formal judicial procedures, such as offenders dealt with by rivate police. Both crimes against persons and crimes against prop-rty showed a decrease from 1952 to 1961. Homicide, however has isen from 12.6 per 100,000 inhabitants in 1950–51 to 19.3 in 1965.

The crime rate for women continues to be a rather small fraction f that for men, although some Mexican criminologists believe that the ifference is only an apparent one because both law enforcement agen-ies and courts are less vigorous in their arrest and conviction of omen. Since 1952 there has been an increase in the rate of sentenc-ng as against the rate of accusation over the years. This trend has een explained as indicating an increase in the numbers and training f police and public prosecutor personnel.

The foreign tourist and the middle-class Mexican alike have little ontact with the police, such contacts as do occur being usually limited drunkenness and traffic violations. With rapid urbanization, traffic as increased greatly. Police control has helped to ameliorate some of he il effects of this growth. Mexico has a death rate from motor ehicle accidents that is extremely low for the Western Hemisphere. n the mid-1960's the rate for Mexico was 6.4 per 100,000 inhabitants; or the United States it was 24.4.

The incidence of murder is among the highest in Latin America, ranking with that for Colombia, El Salvador, Nicaragua, and Honduras. In homicide cases, sharp instruments are the most frequently used weapons, followed by firearms, vehicles, and blunt instruments.

Difficulties with what might be called organized violence show more of a local than a national pattern. In the past 2 years there have been student riots, but generally separated in space and time, and ostensibly for differing reasons. In some cases troops have had to be called in to assist the police (see ch. 14, Political Dynamics).

TREATMENT OF JUVENILES

The constitution requires that juveniles be treated separately from adults; accordingly, the Penal Code for the Federal District and the territories exempts minors of 18 years of age or under from adult penal institutions and processes. Many of the states have made the same provisions in response to Article 18 of the Constitution as amended in 1964–65.

Courts of justice specifically for minors date from the 1920's in Mexico. A tripartite juvenile panel was prescribed, consisting of a teachers, a physician, and a psychologist. In 1928 such a tribunal was established in the Federal District under the Ministry of the Interior, and similar tribunals have been established in other states. A 1941 law requires the three members of the tribunal to have carried out specialized investigations into juvenile delinquency. Their function is one of inquiry and investigation. They prefer to work secretly, to avoid possible harmful publicity to the minor. These investigations were aided by a provision of the 1941 law which set up a Center of Observation and Investigation. All decisions of these tribunals are subject to review by the regular courts.

The juvenile courts are a matter of local jurisdiction. There are now two courts in Mexico City and one in each territory, in addition to those in the states. In case of infraction, a child under 12 years of age may only be sent to a foster home or watched by his own family. If over 12 years old, the minor may go to a correctional institution or school. There is a Department for the Prevention of Juvenile Delinquency, and the Department of Social Welfare is responsible for enforcing the court orders.

Juvenile delinquency has increased along with the general growth in the population, but it has not grown at as fast a rate. As in Mexican adult criminality, there are many more male than female offenders among juveniles.

CHAPTER 27

THE ARMED FORCES

The Mexican Army has a deep-rooted military tradition that reaches back to Aztec and tribal forebears antedating the Spanish conquest. Its military legacy is a mixture of Spanish, ***Mestizo*** (mixed), and Indian tradition. Since the beginning of the Revolution in 1910, the military has drawn on its heritage including, especially, its Indian history as a source of pride and inspiration to develop a professional and dedicated military establishment.

The provisions of the Interamerican Treaty for Reciprocal Assistance, signed in Rio de Janeiro in 1947, and enforced since then through the Organization of American States, appear to have reduced greatly the likelihood of interstate conflicts in the Hemisphere. The likelihood of any Mexican involvement in conflict is especially low, for not only is Mexico very strongly dedicated to the principle of noninterference, but she has no serious disagreements on her own borders.

In recent years, therefore, the Mexican armed forces have increasingly had missions oriented toward internal security and order with a slight though continuing concern with hemisphere defense. The military backs up the national and state police on request, and, through civic activities, contributes in important ways to education, public works, anti-disease an anti-drug-traffic campaigns. The government's approach to internal dissidence is to treat it as a socio-economic problem and to carry through indicated reform and development programs rather than to view it as a political or religious problem as was done in the past. The heavy preponderance of middle-sector political leadership looks to broadly based electoral support rather than to force of arms. Police are used to enforce the law; they are backed by federal troops only if the occasion warrants.

The military has been essentially nonpolitical for many years, and the threat of election-time revolt has faded. Mexico has been free of any serious meddling in civil affairs by the military for thirty years. Manuel Ávila Camacho (1940–46) was the last President to wear a uniform. The Communists have been unable to gain the support of commissioned or noncommissioned officers.

Mexico's defense budget for 1968 constitutes less than 10 percent of the total budget. The military share of the government has been similarly low for some years. An appreciable share of the military budget is devoted to educational, medical, retirement, and other benefits which add significantly to the otherwise modest pay for the armed forces.

HISTORICAL DEVELOPMENT

The country's history during most of the time since the arrival of the Spaniard has been one of recurring conflict, ranging from all-out war to revolutionary skirmishes and forays (see ch. 3, Historical Setting). Mexicans take particular pride in their ancestors' resistance to conquest, and their military heroes remain the indomitable Aztec leaders, not Cortez and his *Conquistadores.*

Colonial wars tended to be small, and in 1758 there were only 3,000 regulars in New Spain, most of them on garrison duty on the northern frontier and in the principal ports. There was also a colonial militia, but it was generally undermanned and underequipped, scattered over the country in infantry and cavalry units at company strength. With the ending of the Seven Years War in 1763 and a growing fear of England, a plan was developed to create colonial armies. These were to consist of regulars raised in the colonies, regulars rotated overseas from Spain, and a disciplined militia. By 1784 there were over 4,000 regulars and more than 39,000 militia in New Spain. The latter years of the colonial era were particularly chaotic, marked by almost constant conflict as faction fought faction and revolution was the order of the day.

In the 19th century the country found itself repeatedly on the defensive, beset by both internal and external forces that threatened its national existence. At the same time, however, these forces contributed to Mexico's unification by fostering among the people a sense of nationalism and a preoccupation with their own history. After Mexico achieved her independence from Spain, the Mexican army was ragged and poorly equipped. It was sorely needed in the struggle for stability, however, since social and political institutions had not caught up with the fact of independence. There was no truly national army in that early period, for taxes to support it were all but impossible to collect, the provinces did not support the federal government, and bandits roamed the countryside. Generals became *caudillos* (chiefs) and *caudillos* became generals, though military leaders were coming less and less from the socio-economic elite. The people were not interested in the problems of external war, and the armies became more interested and involved with internal security and politics.

Later in the century there were several clashes with the United States, culminating in the war of 1846–1848 over Texas, which was resolved in the Treaty of Guadalupe Hidalgo. In 1862 the French intervened. They were beaten by the Mexicans at Puebla, making the

Fifth of May a major national holiday. Two years later, the French went on to impose Maximilian on the Mexicans as their emperor. After a long and fierce struggle, and after diplomatic intervention by the United States, Napoleon withdrew his troops in 1867; Maximilian was executed. The revolution beginning in 1910 marked its first success with the resignation and departure of dictator Porfirio Díaz in 1911.

The early years of the century witnessed a further series of revolutions and international incidents, such as United States seizure of Vera Cruz in 1914 and the brush with Villa 2 years later. The last successful revolt to effect a change of government occurred in 1920. There were three more attempts in the 1920's, but each was more feeble than the last. Since 1930 Mexico has had no violent changes of government.

On December 8, 1941, Mexico severed relations with Japan; on December 11 it severed them with Germany and Italy. In May of 1942 German submarines attacked Mexican vessels and war was declared. The United States and Mexico formed a Defense Commission for collaboration in anti-submarine warfare in the Gulf of Mexico. A Mexican Air Force squadron fought in the Pacific, and many Mexicans fought as United States troops.

THE ARMED FORCES AND THE GOVERNMENT

Political Position

In 1968 the government was still following the Constitution of 1917 which, though amended many times, preserves the basic stipulations concerning the military. This provides for full subordination of the military to civil authorities. The President is the Commander in Chief, but is not allowed to be a member of the armed forces at the time he is President. He appoints all officers; for those of the grade Colonel and above, he must have the approval of the Senate.

Although there is no conscription for the regular forces, all males, upon reaching the age of 18, are required to register for reserve training, which entails 50 weekly drill periods of 4 hours each. There are no organized reserve units, however, and the men normally receive no further training. The Constitution provides that in peacetime the military cannot demand lodging, equipment, or provisions from private householders, a privilege reserved for wartime. Military law is the only field in which a special jurisdiction is allowed. This is in great contrast to earlier times when as many as 34 separate jurisdictions were recognized, including mercantile, mining, and ecclesiastic.

Since World War II the country has succeeded in maintaining the constitutional subordination of the military to the civil. The withdrawal of the military from the political arena has been a particular feature of the on-going Revolution. The military sector of the Institutional Revolutionary Party (PRI), the dominant political party, was dissolved in 1940. Many senior officers do, however, participate in politics in the later stages of their careers, but they do so as individuals. They are often appointed to high government positions as well, but these are apt to be out of the defense field.

Role In the Economy

Federal budget allocations for the military are relatively low. Military expenditures for the fiscal year ending December 31, 1968 were estimated at about 2.3 billion pesos (1 peso equals US$0.08); this represents about 9.4 percent of the estimated federal budget and less than one percent of the estimated gross national product. Out of the total military budget, over half will be spent for pay and allowances, with more than 13 percent for education and medical care and about 15 percent for pensions. Defense outlays for 1967 approximated 2.025 million pesos, or 9.1 percent of the total federal budget. Military spending in 1966 was 6 percent lower than in 1967. In 1965, the defense budget of 1.9 billion pesos represented 11 percent of total government expenditures and less than 1 percent of the gross domestic product.

Defense budgets include funds for the merchant Marine and for military industry. Because close cooperation with the United States in military matters is politically unpopular, Mexico has not requested extensive military assistance from the United States. Much of its equipment is purchased from European sources.

Defense-developed skills contribute importantly to technical skills required for the Mexican economy; for example, nearly all commercial pilots come from the Mexican Air Force.

ARMED FORCES MISSIONS AND COMPOSITION

Missions

The tasks of deterring or prosecuting externally generated conflict remain fundamental to armed force presence and training. The inter-American defense arrangements pledged by the Río Pact of 1947 and exercised since that time through the Organization of American States have shown themselves capable of successfully handling interstate disputes. The long-standing boundary dispute between Mexico and the United States over El Chamizal in the El Paso area was resolved by agreement in 1963.

From time to time Mexico has had problems with Guatemala over fishing and exile activity, but these have been relatively minor. Great Britain might give up her claim to British Honduras (Belize) if Guatemala presses its claim successfully. Should this happen, Mexico would object to any annexation of British Honduras north of 17° 49′, which formerly belonged to the Captaincy-General of Yucatán.

The government has usually treated internal problems extending to violence or insurgency as socio-political problems rather than military ones. The armed forces are used as a back-up to the police, but only upon request.

Activities which have come to be titled "civic action" have long been important in the Mexican armed forces. These activities include building and rehabilitating schools, training teachers, and teaching. Early in the 19th century they had normal schools instructing commissioned and noncommissioned officers how to teach.

Currently, most of the civic action programs are directed from the middle levels of government. They consist largely of projects performed when needed and requested by the 34 zone commanders in conjunction with the state governors. At the highest level of government strong encouragement is given to educational projects and those related to stamping out disease and drug traffic. Road building, disaster relief, and antideforestation measures are frequent tasks for the military, the Army in particular.

Coastal patrol and other antismuggling activities continue as missions for the armed forces. They participate in the Interamerican Geodetic Survey, now including a physical resources survey.

Army

The army is by far the dominant component of the armed forces. From 41,800 men in 1956 it grew to 51,000 men in 1966. These were organized into 50 infantry battalions, two infantry brigades, and two infantry fixed companies. There were 21 cavalry regiments, one mechanized cavalry regiment, and three regiments or artillery with two coastal artillery batteries. They were equipped with light weapons, 105mm. howitzers, armored cars, and light tanks.

Air Force

The Air Force is a subordinate element of the Army. From a personnel complement of 3,500 in 1956 it grew to about 5,000 men in 1966. These are organized into five air groups of 10 squadrons, with a total of 300 aircraft. The aircraft include jet fighters and trainers with, largely, piston engines, United States transports, and United States and European helicopters.

Navy

The Navy is an autonomous force. It is rather small since it has been designed primarily for coastal patrol, and, as such, would not make a significant contribution to national defense. In 1956 the Navy had a strength of 2,500 men; in 1966 the strength grew to 6,200 men including Marines. The fleet consists of about 70 vessels and 20 aircraft.

The vessels include frigates, escorts, patrol boats, transports, landing craft, minesweepers, and tugs. Aircraft include helicopters, utility transport, trainers, and flying boats for transport and reconnaissance.

MANPOWER

Procurement

The men of the armed forces constitute a representative cross section of the population, reflecting generally the country's major ethnic groupings. A large majority are from *mestizo* families, who make up some 55 percent of the population (see ch. 4, Population). Discrimination, however, no longer exists. The officers are drawn largely from the broad middle sector, from both rural and urban areas. This has contributed to the breaking down of regionalism and localism and to the professionalization of the officers, giving them a more national point of view.

The average volunteer adapts readily to military life and authority. He is generally inured to hardship and amenable to discipline; but many are illiterate, and few have had any experience with modern mechanical equipment. Many enter the service with a background of poverty and lack of advantage. The relatively high standard of living as a serviceman, the economic security, and the appeal of the uniform, have all combined to create an atmosphere favorable to military service.

Training

In general, the training of enlisted personnel is continuous and thorough. Once assigned to a unit a man receives on-the-job instruction throughout his military career, and there are opportunities to attend a number of technical schools operated by the various services and branches. The greatest emphasis is placed on the training of noncommissioned officers, who are periodically able to attend courses at different levels to further their career development. Noncommissioned officers are mostly long-term professionals who have come up through the ranks and been selected on the basis of experience and proven capability. As a group they constitute one of the mainstays of the military services.

Formal training for officers includes the courses at the Military Academy (Colegio Militar) founded in 1827. It was originally oriented primarily toward artillery and engineer requirements, but now offers a complete service curriculum.

Non-Mexican training sources are used. For example, over 200 Mexican officers have graduated from the United States Army Southern Command's School of the Americas at Fort Gulick in the Canal Zone. Others have graduated from the United States Army's Special

Varfare School at Fort Bragg. Graduates of Mexican military acadmies are estimated to have the equivalent of from 10 to 12 years of cademic training.

CONDITIONS OF SERVICE

Living Conditions

The Army is the element of the forces most closely associated with he personal lives of the people, and its historical background and radition are generally familiar to most citizens. Uniforms are a comnon sight, and although the size of the military establishment limits pportunities for a professional military career, a good percentage of he country's young men undergo a relatively brief association with he armed forces through training and reserve activities. The military s not emphasized, however, and it is not a dominant facet of the naional culture.

The life of the military man is not overly strenuous, and discipline s not severe; at the same time, it is not one of ease or affluence. The ewards of a military career are limited, but they compare favorably vith equivalent levels in civilian life, particularly for the average eon or Indian farmer. There are opportunities for education and dvancement, and there exists a degree of security that would be difficult to attain outside the military service. The pattern of daily life n the Air Force closely follows Army routines, while the Navy offers n environment that appeals to many as novel and unique.

Military posts are scattered throughout the country, with many of he principal installations concentrated in the Mexico City area. Since 962 there has been an extended construction program in progress hat has gradually been eliminating the primitive and inadequate uarters that had existed earlier. The new buildings are of modern onstruction and design, often comprising complete units of officer, roop, and family housing. Priority has been given to the older established permanent posts, and close to 70 percent of the major installaions, particularly around Mexico City, have eliminated the former nud shacks that were typical of many of the older stations. Although onstruction standards have not always been found to be of the ighest quality, military housing has, nevertheless, been improved ignificantly.

Pay, Allowances, and Benefits

In general, quarters, rations, services, and benefits compare favorbly with what the average soldier would find in the civilian economy. ay is low, however, and many officers and enlisted men with family esponsibilities must take on additional off-duty work in order to neet their obligations. This situation is compensated for, to an extent, by prestige and security, particularly among officers and noncommissioned officers, while additional advantages such as retirement, accrual of leave, and medical care, also help to counterbalance the inadequate compensation. Pay scales do provide for some supplementary allowances for families, hazardous duty, flying pay, and the like, but for the most part these categories are kept to a minimum.

Retired officers get pensions sufficient to keep them at their customary standard of living, although here, again, added employment is often necessary or desirable. Such employment is generally available because of the valuable technical skills developed by a military man during his career. Mexicans appear to feel that fringe benefits such as low interest loans, free or low-rent housing, medical and dental care, and servants add about 40 percent to an officer's income. Article 12 of the Transistory Articles of the Constitution provides that persons who have fought in the constitutionalist army, and their children and widows (as well as others who have served the Revolution or public education), shall have priority in the acquisition of parcels of federal land that are made available, and shall have a right to discounts specified by law.

Food is ample and nutritious and follows the familiar and accepted dietary pattern of the country. Messes are usually maintained at battalion level, and units have their own staffs of cooks and bakers. Mess personnel are normally trained at the Army's Cooks and Bakers School, which brings them to a high level of competence. Although kitchens are often rustic and primitive, their product is conceded to be of high quality, and, in general, the men consider that they are well fed.

MILITARY JUSTICE

Discipline is not particularly severe in the armed forces, and maintaining order is not a major problem. The average serviceman has a background of traditional deference to authority; obedience to his superiors is considered a normal adjunct of military life.

There is scant information on military justice or the conduct of courts martial. There appears to be no system of permanent military courts, and tribunals are convened as needed. Both the Army and the Navy have their Judge Advocate's Corps, which supervise all military legal matters. Courts operate under the provisions of the Code of Military Justice, which closely resembles the Unified Code of Military Justice of the United States. Commanding officers have relatively wide disciplinary powers, and courts martial are generally resorted to only in cases of serious offenses.

In the colonial period a grant of special military privileges (*fuero militar*) that had been developed in Spain was extended to New Spain. It was codified in 1768 and gave jurisdiction over both civil and criminal cases to the regular armies, including their families, and to the colonial militia. This made military personnel virtually immune to civil authorities and was an important fringe benefit serving to enhance enlistment rates. This form of the military man's *fuero* carried beyond Independence, but many of the military's special privileges were taken away in the Constitution of 1857. Since the army has no fixed domicile, it must take its system of justice with it wherever it goes, which, in part, explains why the present Constitution provides that the military is the only field in which one can be judged by special courts. The Supreme Court of Justice, however, has jurisdiction over disputes between military courts and federal or state courts.

Martial law, involving the suspension of constitutional guarantees, is ordinarily applicable only in time of war. However, other than peace and war a third condition is recognized in law, a State of Siege, where guarantees can be suspended. This is provided for in Article 29 of the Constitution in cases of invasion, serious disturbances of the peace, or anything placing society in great danger of conflict. In 1941, this provision was expressed in the Law of Social Dissolution, Article 145 of the Federal Penal Code, which was passed to deal with Nazi and Fascist operations in Mexico. It has since been used in cases of riots, and it has been used against strikes as well.

RANK, UNIFORMS, AND INSIGNIA

The rank and grade structure of the Mexican services closely parallels that of the United States. One difference is the existence of the rank of sublieutenant, a probationary grade below second lieutenant. This is designated *subteniente* in the Army and *guardiamarina* in the Navy. On service uniforms, officers display insignia of rank on shoulder straps in the Army and on the sleeve cuff in the Navy. The Air Force wears the uniform and insignia of the Army. Noncommissioned officers' insignia are worn on the upper or lower sleeve.

Officers' insignia of rank in the Army and Air Force are indicated by bars, stars, or embellished stars. A sublieutenant wears one gold bar, a second lieutenant two, a first lieutenant two and a half, and a captain three. Field grade starts with one gold star for a major, two for a lieutenant colonel, and three, set in a triangle, for a colonel. General officers wear silver stars with the addition of a semicircular laurel wreath enclosing the eagle of the national arms. A brigadier general has one star, a major general two, and a lieutenant general, the highest authorized grade, three. A brigadier general is called *general brigadier;* a major general, *general de brigada;* and a lieutenant general, *general de división.*

Navy officers' insignia of rank are worn as gold stripes just above the cuff (or on shoulder boards), with the uppermost stripe incorporating a braid loop some 2 inches in outer diameter. The number and pattern of stripes correspond exactly to United States equivalents, with the added insigne for *guardiamarina* which uses one half stripe. Members of the Naval Infantry, or Marine Corps, are distinguished by a red piping on insignia of rank.

Noncommissioned officers' insignia of rank consist primarily of horizontal stripes worn on the sleeve. The Army displays the stripes in the color of a man's basic arm, worn above the elbow. The most prevalent colors are red for infantry, blue for cavalry, and purple for artillery. A private first class wears one short stripe (vertically), and a corporal one full stripe horizontally. Sergeant second class has two stripes, and a sergeant first class, three. There are no army warrant officers. The Navy uses the rank of corporal, which is designated by a white chevron on the upper sleeve. Petty officers wear white stripes at the cuff, one for petty officer second class, and two for first class. A chief petty officer has three stripes, and a warrant officer one gold stripe without the loop.

The Army has a blue dress uniform and a service uniform and field green similar to that of the United States Army, but a shade duller. Suntan khaki is used for hot weather. The Navy, including the Naval Infantry Corps, uses standard navy blue or white. There are a variety of dress, service, and field uniforms for all services. Army jackets are standard single-breasted models, worn with straight trousers except in the field. Cavalry officers may wear breeches and boots. Navy officers use the blue double-breasted coat similar to that of the United States Navy, but more fitted and with two rows of five buttons each. White uniforms are worn in hot weather. There is also a khaki work uniform that is worn with shoulder boards. Uniforms for enlisted men closely resemble United States Navy wear.

Headgear ranges from the conventional peaked service cap to field caps of the overseas type or steel helmets. Helmets are very similar to the French design. Senior officer service caps have visor decoration that becomes more elaborate as the position in the hierarchy rises.

The Army uses branch insignia, mostly appropriate heraldic devices in brass worn on the lapel, and the Navy has a variety of cloth specialist badges that supplement rank insignia. The ornaments of both services in many cases closely resemble United States equivalents. There are also a number of badges to indicate special duties or accomplishments, and these are worn mostly over the right breast pocket. There is a distinctive emblem for graduates of the Military Academy, and others to indicate Presidential Service, General Staff Corps, aides, and the like.

The eagle emblem of the national coat of arms is used extensively for decoration and is incorporated as a central theme for buttons, cap ornaments, wings, and other items of apparel. Officers purchase their own uniforms, while enlisted men receive a standard issue, which in addition to uniforms includes equipment and personal items. Uniforms

nd accessories are comfortable and of generally good quality; they
dequately meet the needs of the individual, and the serviceman, for
ie most part, presents a neat and professional appearance.

AWARDS AND DECORATIONS

Mexico makes extensive use of awards and decorations, and the mili-
ary are particularly conscious of the numerous national symbols of
fficial recognition for both military and civil distinction. There are
everal strictly military decorations and numerous awards for indi-
idual accomplishment of a professional, academic, or technical nature.
Iilitary personnel are eligible for any national decoration, many of
hich may also be presented to foreign nationals. Foreign decorations
an be accepted and used, but not without the permission of the Fed-
ral Congress or of its Permanent Committee.

The country's highest award is the Mexican Order of the Aztec
Eagle. Created in 1933, it is presented in six grades, the highest of
hich, the Grand Collar, is given only to heads of state. Of the mili-
ary decorations, the most important, in order of precedence, are the
Iexican Legion of Honor, the Cross of Military Merit, the Heroic
alor Medal, and the War Cross.

The Cross of Military Merit for Army use, was created in 1902 and
s in three classes. The crosses are gold for officers and bronze for en-
isted men. The Heroic Valor medal or Cross was established in 1926
nd also is in three classes. There is a Decoration for Naval Merit, a
tar established in two classes in 1926. The Decoration for Merit in
ir Service has three classes, gold, silver and bronze, and was created
n 1929. In addition, a Decoration for Technical Military Merit was
reated in 1926, a first class for Mexicans and a second class for for-
igners who have assisted in developing the armed forces. Also in 1926
Cross for Fidelity was established in four classes, and in 1911 a Cross
or Pensioners was created.

There are various other awards to recognize long and meritorious
ervice or special accomplishment in such fields as engineering, sports,
r teaching in military schools. Commemorative campaign medals
ave been issued to participants in the significant battles, campaigns,
nd wars in the country's history. They were struck and issued to
articipants in the resistance to the United States invasion of 1914,
or example, for convoy and patrol duty during World War II, and
or service in the Far East with the Mexican Expeditionary Air Force
n the Pacific in 1945.

LOGISTICS

The principal deficiencies of the armed forces are probably in the
rea of logistics. Limited financial resources and dependence on foreign
ources of supply create serious problems in procurement of major

items of armament and material. Mexican participation in the United States Military Assistance Program has been quite limited. Of the US$811 million in military grants within the Western Hemisphere from July 1, 1945, to June 30, 1963, Mexico received only $1 million and total military aid to Mexico in all forms amounted to only $3.2 million from 1950 to 1960. For Fiscal Year 1967 the total of United States Military Assistance to Mexico was to be only US$100,000.

The military logistics system is geared to peacetime needs, and though it fulfills these requirements adequately, even here there are deficiencies in distribution, support, and maintenance. As presently organized the system is not estimated to be capable of sustaining the current forces for any length of time in active wartime operations.

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GLOSSARY

abolengo—Old families of distinguished ancestry, wealth or position.

amparo—A category of legal actions which guard individual civil rights. Literally, *amparo* signifies protection, assistance or a human refuge.

Aztec—The last and largest of the preconquest Indian cultures to rule the Valley of México. The capital was Tenochtitlán whose founding is based on the legend of Huitzilopochtli, the principal god. Power was exercised by a feudalistic state. At the time of the Spanish conquest, Moctezuma II was the ruler.

barrio—Autonomous neighborhood ward or subcommunity within a city.

braceros—Mexican farm laborers engaging in seasonal wage-labor in the United States.

BUO—Bloque de Unidad Obrera (Worker's Unity Bloc). A unified labor organization formed in 1949 by the Confederation of Mexican Workers.

caballerismo—Noble and courteous, in a gentleman-like manner.

cacique—Any leading inhabitant of a small town or village, often a local or regional political boss.

caciquismo—A power structure focusing on provincial party chiefs.

calzones—White unbleached muslin trousers tied with a handwoven sash.

campesino—Literally a countryman, translated as peasant; usually a farmer, but the term is applied to most lower class rural dwellers.

castizos—Of a noble descent; descendants of Spaniard and *mestizo*.

caudillo—Basically, chief of a body of armed men, or as customarily used, a military dictator and autocrat.

cédulas hipotecarias—A popular form of mortgage certificate secured both by real estate, and guarantees of the issuing mortgage banks.

CEN—Comité Ejecutivo Nacional (National Executive Committee). Executive Committee of the PRI.

CGOCM—Confederación General Obrera y Campesina de México (General Confederation of Mexican Workers and Farmers). A labor organization founded in 1933 as splinter group of CROM. CGOCM emerged in 1936 as the Confederation of Mexican Workers.

Chichimec (*Chichimeca*)—Northern nomadic tribes of Indians whose invasions were a threat to Indian and Spanish cultures.

CIT—Cámara de la Industria de Transformación (Mexican Manufacturers' Association).

CNT—Central Nacional de Trabajadores (National Workers' Union).

compadrazgo—Relationship contracted by a godfather with the parents of a child for which he stands sponsor.

compadre—A fictive kin relationship between a father and his child's godfather.

CONASUPO—Compañía Nacional de Subsistencies Populares (National Popular Subsistence Food Company). The Government organized and operated corporation which purchases farm products at guaranteed prices, stores surpluses, and distributes food to low income groups through its own stores, at discount prices.

conquistadores—The Spanish conquerors.

Constitution of 1917—The most hallowed document of the Mexican Revolution which incorporated political elements prevalent in most 19th century Western constitutions.

constitucionalistas—The forces of Villa, Obregón, and Carranza.

continuísmo—Prepetuation by extra legal means of a President's power beyond the elected term of office.

Council of Indies—An organization created by the Spanish Crown that was responsible for the governing of the Spanish Indies which included México.

CREFAL—Centro Regional de Educación Fundamental para la América Latina (Regional Center of Basic Education for Latin America).

criollos—Mesoamerican-born Spaniards.

CROC—Confederación Revolucionaria de Obreros y Campesinos (Revolutionary Confederation of Workers and Farmers). A loosely-knit labor organization formed in 1952 in opposition to the CTM; today a supporter of the PRI regime.

CROM—Confederación Regional Obrera Mexicana (The Regional Confederation of Mexican Labor). Founded in 1918 by Luis Morones with the support of President Obregón in order to provide organized support for Mexican workers in their claims against entrepreneurs.

CTAL—Confederación de Trabajadores de la América Latina (The Latin American Workers' Confederation). An international leftist Latin American labor organization.

CTM—Confederación de Trabaiadores de México (Workers' Confederation of México). A national labor organization which was created out of the old CROM. It has remained the largest labor group in Mexican commerce and industry despite various ups and downs of government favor.

curanderos—Folk healers who use herbs in their treatments.

educar es redimir—To educate is to redeem; popular motto of the Revolution of 1910.

ejido—Originally the traditional Indian communal farmland. Now communal municipal or state lands, especially collectively or individually farmed state lands regulated by the state.

empleomania—Rage for public office.

empresas de participación estatal—State participation enterprises created in the form of private corporations but controlled by the state through majority stock ownership.

Federación de Sindicatos de Trabajadores al Servicio del Estado (*Federation of Syndicates of Workers at the State Service*)—A civil servant's and teachers' organization.

fiesta—Festivity; often a religious festival and the main source of diversion for rural people.

financieras—Private investment or development banks.

gachupines—Iberian-born Spaniards; Spanish Republican expatriates residing in México.

hacienda—A large estate, ranch or plantation.

hacendado—Owner of a *hacienda.*

hispanidad—The state of being Spanish; the mystique of cultural superiority and unity of the Hispanic world.

IDB—Interamerican Development Bank.

IMSS—Instituto Mexicano del Seguro Social (Mexican Social Security Institute). The national governmental agency responsible for the social security program.

jacal—A primitive hut often made of mud and brush or corn stalks and the like.

juntas de agua—Local water boards or commissions.

Literary and Social Club of Querétaro—A secret society of the underground movement for independence. Many of its members played key roles in the independence movement.

mariachis—Wandering musicians usually attired in the costume of Mexican cowboys.

Maya—An Indian culture, located in the Yucatán Península.

Mesoamérica—Middle America.

mestizaje—The process of blending Indian and Spanish (or other European) racial and cultural traits.

mestizos—Persons of mixed Spanish and Indian racial and cultural heritage.

metate—Traditional grinding stone for preparing cornmeal.

misioneros—Missionaries teachers for rural areas.

MLN—Movimiento de Liberación Nacional (National Liberation Movement). Formed in 1961 in an attempt to form a united leftist opposition to PRI, founded during the first year when Vicente Lombardo Toledano took the Mexican Communist Party (PPS) out of the MLN.

mole—A traditional Mexican special dish made with chocolate, different types of chile, peanuts and sesame seeds; served with chicken or turkey, rice and beans.

morissos, *moros*—Descendant of Spanish and mulatto forebears.

MRP—Movimiento Revolucionario del Pueblo (Revolutionary Movement of the People). Most radical of today's nonparty interest groups, led by Raúl Ugalde.

mulato—A Person of mixed Negro and European races.

municipio—Municipality political division of territory below the state level, corresponding roughly to the county in the United States.

NAFIN—Nacional Financiera (National Investment Bank). The largest and most important government development bank, specializing in long-term credits for industry and economic infrastructure.

Nahuatl—A native Indian language.

OAS—Organization of American States.

Olmeca—An early Indian culture which was located in the Gulf Coast jungle country of eastern Veracrúz and western Tabásco considered to be the "mother culture" of the advanced Mesoamericans. They are distinguished from later Olmecs by the name "Tenocelome" or "those of the jaguar mouth" in reference to their style of sculpture.

ORIT—Organización Regional Interamericana de Trabajadores (Inter-American Regional Organization of Workers). Inter-American Regional Federation of Unions, for which the CTM adheres. Affiliated through IFFTY, the free-world international trade union organization.

padrino—Godfather; term of address used by godchildren toward godparents.

PAHO—Pan American Health Organization. A subsidiary agency of the OAS.

PAN—Partido Acción Nacional (National Action Party). The principal and most influential opposition to the PRI.

panistas—Members of PAN (the National Action Party). Primary opposition party to PRI.

parcelas escolares—Plots of land in which rural schools teach elementary agricultural techniques.

PARM—Partido Auténtico de la Revolución Mexicana (Authentic Party of the Mexican Revolution). A legally registered political party, often viewed as a conservative wing of the PRI.

PEMEX—Petróleos Mexicanos. A government monopoly of nationalized oil fields and refineries created by Cárdenas. This act made Cárdenas a national hero because it symbolized Mexico's break with foreign domination through the expropriation of the foreign oil properties in 1938.

peninsulares—Persons born and raised in Spain.

peso—The monetary unit containing 100 centavos. Long-standing free rate: Mex$12.50 equals US$1.

plaza—A town square and the focus of the Spanish town around which were situated the symbols of Spanish dominance; the church, the town hall, and the residences of Crown officials.

PNM—Partido Nacionalista de México (Nationalist Party of México). One of the stronger conservative opposition parties in México today; openly pro-Catholic.

porfiriato—The long rule of Porfirio Díaz.

PPS—Partido Popular Socialista (Popular Socialist Party). The Mexican Communist party, led by Vicente Lombardo Toledano; since 1964 an "official" opposition to the PRI when it was granted legal status.

preparatorias—Schools above the secondary level which prepare students for higher study in universities or professional 'and technical schools.

PRI—Partido Revolucionario Institucional (Institutional Revolutionary Party). The new name given to the national political party, the PRM, in 1945. Today PRI is México's dominant political party.

PRM—Partido Revolucionario Mexicano (Mexican Revolutionary Party). The PRM became the present PRI during the regime of President Ávila Camacho.

PRN—Partido Revolucionario Nacional (National Revolutionary Party). PRN became the PRM under Cárdenas in the late 1930's. This in turn became the dominant PRI under President Ávila Camacho in the 1940's.

guarderías infantiles—Nursery school, some of them sponsored by the government for children of low income working mothers.

rebozo—A long straight shawl.

Reforma (la)—That period of the 19th century dominated by liberal thinkers with great faith in the power of words.

reglamentos—Detailed administrative regulations.

secundarias—Secondary schools which provide terminal diplomas or preparation for technical or vocational training.

sapare—Woolen blanket worn like a shawl.

super mercado—Supermarket.

Teatihuacán—An Indian culture which was the dominant power of the early Classic period. It was the first of the great Indian civilizations to unite most of Mesoamérica and rule from the Valley of México.

tierra caliente—Hot low lands.

Tierra de Guerra—A name given to the northern land of México by the Spanish.

tierra templada—Temperate zone.

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tierra y libros— (land and books). A popular motto of the Revolution of 1910.

Toltec—An Indian culture which was an amalgam of elements probably of northern and western origin whose dominant tribe was the Toltec-Chichimec. The power center of the culture was the city of Tollan founded by legendary figure Quetzalcoatl.

tortillas—Thin unleavened griddle cakes made of ground maize treated with lime.

Treaty of Guadalupe Hidalgo—A final peace settlement which ended the Mexican-American War and seceded to the United States all Mexican territory north and west of the Rio Grande in return for US$15 million.

UGOCM—Union General de Obreros y Campesinos de México (the General Union of Mexican Workers and Farmers). A splinter left labor federation formed by Vicente Lombardo Toledano after he was expelled from the Worker's confederation of Mexico (CTM) in 1947. Since that time the UGOCM is the Mexican affiliate of the Communist World Federation and of Trade Unions and of the CTAL, but is not legally recognized. It is the action branch of the Popular Socialist Party (Partido Popular Socialista—PPS), and represents less than half of one percent of union membership.

UNS—Unión Nacional Sinarquista (National Sinarquista Union). With PAN, one of the two most influential rightist political parties.

vaqueros—Cowboys of Northern Mexico.

viviendas—Family dwelling units often associated with one or two story, patio-centered tenements.

xenophobia—A fear or hatred of strangers or foreigners.

zambo—A person of mixed Negro and Indian races.

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